POLICY PAPER

Social Housing in the Irish Housing Market

Dorothy Watson*

Economic and Social Research Institute

Eoin Corrigan

Department of Housing, Planning and Local Government and University College Dublin

Abstract: This paper traces the evolution of social supports for housing since 2004, including local authority (LA) housing, housing provided by Approved Housing Bodies (AHB) and support for renting in the private sector through schemes administered by the local government sector (Rental Accommodation Scheme (RAS) and the Housing Assistance Payment (HAP)) and the Rent Supplement scheme operated by the Department of Employment Affairs and Social Protection. Given the increased use of the private sector to provide housing for low-income households, the paper draws on SILC data to examine changes between 2004 and 2015 in the quality of housing in different sectors, as measured by problems such as dampness, lack of central heating, lack of double glazing, insufficient light and noise. The analysis finds that the overall percentage of housing that is socially supported increased during the recession to 17 per cent from 13 per cent in the boom years (2004-2007, mainly via increased use of Rent Supplement) but dropped back towards pre-recession levels by 2015 (about 15 per cent). The use of the private sector as a source of socially-supported housing rose from 28 per cent in the boom years to 42 per cent during the recession before dropping back to 33 per cent by 2016. Housing quality improved between 2004 and 2015, with a drop from 16 per cent to 9 per cent in the percentage of people living in dwellings with two or more of five quality problems; the improvements were significantly greater for those living in rented than owned/mortgaged dwellings, though rented dwellings remained at a disadvantage in 2015. Improvements in quality in the rented sector were found across the income distribution.

Acknowledgements: The authors of this report are grateful to the Department of Housing, Planning and Local Government whose Housing Research Programme with the ESRI funded this project. The members of the Steering Group for the research programme were engaged and supportive. We are also grateful to staff of the Department who helped by providing additional figures on the housing support schemes. We thank the Central Statistics Office for access to the Survey on Income and Living Conditions and for their support in using these data. Finally, we are grateful to our colleagues at the ESRI, the Department and the Research Programme Steering Group for comments on earlier drafts of the paper as well as to the anonymous peer reviewers for this journal.

^{*} Corresponding author: Dorothy. Watson@esri.ie

I INTRODUCTION

State support for housing in Ireland has undergone some dramatic changes in recent decades. The traditional "twin pillars" of housing policy included the facilitation of home ownership as the ideal, combined with the provision of social housing through the local authority system for those who could not afford to purchase on the market. The private rental sector was very small and very much a residual category. This has changed very quickly in the years since 2006 with the private rented sector playing a much greater role in housing low-income families, often with the support of income supplements or housing benefits from the state.

In this paper we provide an overview of social housing provision in Ireland and then go on to draw on the Irish Survey of Income and Living Conditions (SILC) to examine some key elements of housing quality by housing tenure.

II SOCIAL HOUSING IN CONTEXT

Figure 1 shows a schematic diagram of the shape of the current Irish housing system, from the demand perspective, showing where social housing and supports for low-income households fit into the picture.

(Adequate supply House for purchase) purchase Adequate Umited Supply for Effective resources Purchase) demand (income, savings, credit) Private (Rent supp.) rental Not eligible Demographic for social Demand housing Other Inadequate (Limited social housing supply) (sharing, resources income, savings crowding, credit) homeless) Eligible Local for social authority & housing AHB social (Adequate social housing housing supply)

Figure 1: Overview of the Role of Social Housing in the Irish Housing Landscape

Sourc Authors' analysis.

The overall 'demographic demand' or need for housing is linked to population size and age structure and also to current living arrangements. As the population increases, all other things being equal, the demand for housing will increase. Demand will also be greater where the proportion of young adults still living at home is higher as they leave home to form new households. An ageing population may lead to a demand for smaller housing units with improved accessibility and convenience features.

The traditionally preferred option has been home ownership, usually involving a mortgage in the initial period. Households that can afford to do so will typically choose this route. Based on census data, we see that the homeownership rate (Figure 2) has been declining since the recession and property crash, though it is still the dominant tenure. Even in 2016, over two-thirds of households owned or were purchasing their dwelling.

Private renting has traditionally been seen as a temporary tenure in Ireland, while the (usually) young family saved for a deposit to purchase, or built up a good enough credit rating to qualify for a mortgage. Households that cannot afford to purchase can be seen as falling into two groups, and that (as we shall see below) is how policy in Ireland treats them: those who have a long-term need of social housing supports and those for whom the affordability issue is presumed to be short term. The distinction can be difficult to make in practice and is often based on the length of time for which the household has been receiving financial support for rent.

As we shall see below, the private sector has played an increasing role in the supply of housing for those unable to afford to purchase, largely through an increase in the number of renters claiming supports. The legacy of the 2008 to 2012 economic challenges, in the form of reduced public funding, consequent relatively low supply of additional social housing, and available supply in the private rental market, contributed to the increased role of the private sector. However, since 2015, the State has increased its investment in the supply of local authority and Approved Housing Body owned dwellings, while also supporting those with a long-term housing need to continue living in the private sector.

Another factor which has almost certainly affected the demand for rental accommodation is the pattern of migration in recent decades. Net migration during the 2006 to 2017 period is estimated as 176,900 persons, despite that from 2010 to 2014 net migration was negative. Census 2016 indicates that households headed by an immigrant² are more likely to rent in the private market than non-migrant households; the proportion of the former which rent privately was almost 60 per cent, as compared to approximately 13 per cent of Irish households.

¹ Central Statistics Office tables PEA16 and PEA17, available at www.cso.ie.

² That is a household which had a household reference person with a nationality other than Irish.

³ A household which had an Irish household reference person.

2.1 Changing Patterns of Housing Tenure

Between 2002 and 2016, there was a dramatic shift in the distribution of housing tenures, as can be seen in Figure 2, which draws on the census data from 2002 to 2016. This period coincided with the economic boom of the Celtic Tiger years, the period of the Great Recession (approximately from 2008 to 2012 in Ireland) and early recovery (2013 onwards). The figure shows the percentage of households in permanent private housing units occupying their accommodation with each of the different tenure categories.

Between 34 and 36 per cent owned their home outright from 2002 to 2016 with another 32 to 41 per cent purchasing the home with a mortgage. While the percentages owning the home outright remained relatively stable across the period, there was a marked fall (from 41 per cent to 35 per cent) in the proportion of households purchasing accommodation between 2006 and 2011, with the onset of the recession, and a further fall to 32 per cent by 2016.

The 2002 to 2016 decline in owner occupation reflects a longer trend. Ireland's historic very high rate of owner occupation, which reached close to 80 per cent in 1991 (Central Statistics Office, 1993) was largely a consequence of a policy regime in which regulation and generous public subsidies worked to steadily increase owner occupation. Generous universal public subsidies in the form of homeownership grants and supplementary grants for low income households have long featured, such that a 1958 United Nations report found that 97 per cent of new dwellings received a public subsidy and, by the 1960s, almost 30 per cent of the cost of a standard suburban home could be recouped from Government by the purchaser (Norris, 2016b). The tax treatment of owner occupation was also favourable, in that taxes on imputed rent were abolished in 1969 and mortgage interest tax relief permitted homeowners to write off mortgage interest against tax. This system was largely dismantled in the 1980s, in the context of recession and stagnation. Many of these subsidies have been withdrawn, however owner occupation still enjoys a tax advantage relative to private rental, which undoubtedly impacts on the affordability of each tenure.

Affordability is likely to be a prime determinant of the tenure status of households; the relative affordability of home purchase, market and social rental for specific households will act to assign tenure status to households. Inability to access homeownership for large cohorts of households also seems likely to add to demand for other tenures, resulting in price inflation in private rental markets. Housing affordability is the subject of a companion article in this issue of the Review.

Turning to the rental market, there was a sharp increase in the percentage of households renting in the private market from 10 per cent in 2006 to 19 per cent in 2011. Most of the change took place between 2006 and 2011, coinciding with the Great Recession and property crash.

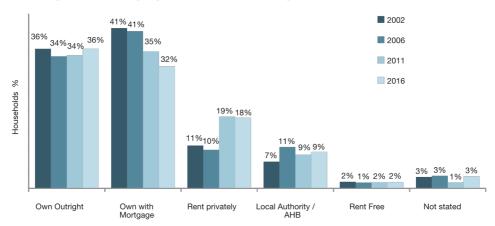


Figure 2: Changing Patterns of Housing Tenure from 2002 to 2016

Source: Census of Population, households in permanent private housing units from www.cso.ie Tables B1321, C0621, E1006.

The census figures suggest that the number of rented social housing units made available through the local authorities or Approved Housing Bodies had increased from 7 per cent to 11 per cent between 2002 and 2006 but fell back slightly to 9 per cent during the recession and early recovery. Clearly, it was the private rented sector rather than the narrowly defined social housing sector that filled much of the affordability gap resulting from the recession, notwithstanding that a considerable proportion of private rental tenancies have been subsidised in one form or another.⁴

A small number of households occupy their accommodation rent free (1 to 2 per cent). About 3 per cent of households do not provide information on the nature of occupancy, though this dropped to about 1 per cent in 2011.

The share of publicly-owned housing has, until very recently, declined considerably since its mid-twentieth century peak of approximately 20 per cent. As discussed below, polices which have permitted and encouraged tenant purchase have had a considerable impact on the stock of publicly owned housing. In recent decades, the delivery of housing supports in many developed countries has increasingly favoured market provision and Ireland has been no exception.

A pervasive feature of the social housing system has been tenant purchase arrangements, which originally applied solely to rural social housing but which were extended to urban housing in the 1960s. Tenant purchase schemes have provided a generously subsidised route to owner occupation for local authority tenant households, the uptake of which has been sufficiently strong that by the early 1990s a quarter of the national housing stock in private ownership had been sold to tenants (Fahey *et al.*, 2004). This share has since diminished, however tenant

⁴ See Appendix Table A.1 for a comparison of estimates of the level of provision of social housing between Census 2016 and administrative sources.

purchase arrangements remain in place, albeit somewhat more constrained than has previously been the case.

A related aspect of social housing has been the residualisation of the social housing system, which can be understood as the system tending to house an increased proportion of deprived households and to cater more exclusively for such households. Norris (2005) notes that the Irish social housing sector has generally let to disadvantaged groups since the 1920s and the sector may have always been more or less residualised, however evidence suggests that the degree of residualisation had worsened from the 1980s to the early 2000s; typical incomes of households in social housing had diverged, educational outcomes were poor and there was a higher risk of poverty and dependence on social welfare, most especially in urban areas. Evidence from the CSO Survey on Income and Living Conditions from 2006 to 2015 indicates that residualisation has persisted, in that typical incomes are considerably lower than those among other tenure groups, although not universally so. However, there is some evidence of progress toward convergence in educational achievement.⁵

2.2 The Economic Context

The uncertain property market and tight lending environment since the start of the recession prevented many younger householders from purchasing. As a result, those currently renting from private landlords are likely to include a certain proportion of households with a more favourable socio-economic profile than was the case in the boom years. On the other hand, the very substantial increase in the number of recipients of rent supplement (from about 58,000 in 2004 to a peak of about 88,000 in 2012),⁶ suggests that the composition of those renting from a private landlord may be less favourable in terms of employment status. In any event, the change in composition of the housing tenure groups is relevant to the quality of accommodation, as we will see in the second part of this paper. For instance, if there is an increase in the proportion of middle-income or higher-income households renting in the private sector, then one might expect that to be associated with an improvement in the quality of accommodation.

Research by Maître *et al.* (2014) shows very sharp increase in financial stress among housing purchasers when we control for other characteristics. We go beyond this analysis here to ask whether there is evidence that house purchasers and renters are responding to this affordability pressure by remaining in accommodation that is of poorer quality.

⁵ Based on authors' analysis of the 2006 to 2015 SILC files, the educational attainment of households renting from a local authority has increased considerably over the 2006 to 2015 period.

⁶ The number of recipients of weekly social welfare payments increased by a similar proportion, from 958,000 to 1,469,000 from 2004 to 2012 (Department of Social Protection, 2013).

2.3 Housing Need

Section 21 of the Housing (Miscellaneous Provisions) Act 2009 requires each housing authority to prepare a summary of the social housing assessments carried out in its administrative area annually. The data are analysed by the Housing Agency and a national report is compiled.

On the basis of an analysis of this material, the Housing Agency found that nearly 86,000 households were deemed to be qualified and in need of social housing support in 2017. Most were working-age households dependent on social welfare payments, with approximately 63 per cent reliant on social welfare as the sole income source. Nearly three-quarters were single-adult households (including lone parents). Of households in need of accommodation, 41 per cent were dependent on Rent Supplement (Housing Agency, 2017).

2.4 Cross-National Comparisons

There is no universally accepted definition of social housing, which makes international comparisons difficult. For instance, there are differences in the treatment of housing co-operatives, time-limited subsidies and the role of private suppliers (Whitehead and Scanlon, 2007). Across countries, there are also differences in terms of the groups served, ranging from only the very poor to the low-waged working class to middle classes. There are also differences in the providers (private or public sector) and in the funding regimes (*ibid*).

Using the national definitions of social housing, Whitehead and Scanlon (2007) note that as a component of total housing, social housing accounts for a low of 4 per cent in Hungary to a high of 25 per cent in the Netherlands, with Ireland towards the low end at 8 per cent. In Ireland, the definition included local authority rented dwellings and those provided through the much smaller voluntary and co-operative sector (now known as Approved Housing Bodies, or AHBs).

2.5 Housing Quality in 2007

Although it is over a decade since a major survey on housing quality was conducted in Ireland (Watson and Williams, 2003), the Survey on Income and Living Conditions (SILC), carried out annually by the Central Statistics Office (CSO), includes a rich source of information on housing and housing quality. The SILC provides data on household incomes and living standards which are used for a range of research and policy purposes related to social inclusion in Ireland.

Findings by the CSO (2009) from the 2007 SILC ad hoc module on housing conditions showed that one-third of households reported at least one problem across the six areas covered (adequacy of space, electrical, plumbing and heating equipment, dwelling warmth in winter and cooling in summer). Not surprisingly, the CSO found a strong relationship between poverty or lower socio-economic position (employment status, education) and inadequate facilities, dissatisfaction with the dwellings and difficulty in accessing services. Housing quality was also strongly differentiated by housing tenure.

III COMPONENTS OF SOCIAL HOUSING OUTPUT BY DEPARTMENT OF HOUSING, PLANNING, COMMUNITY AND LOCAL GOVERNMENT

Table 1 shows the main forms of provision for individuals and families who cannot afford adequate housing on the private market.

Tenures in traditional local authority housing are very secure (Brooke, 2014). The dwelling belongs to the local authority and the rent is a differential rent with the amount payable depending on the household's means. In law, local authorities have considerable flexibility to terminate tenancies. However, such terminations are very rare; tenancy security has been described as being, in practice, virtually guaranteed, provided the rules of occupancy are observed and excessive rent arrears are not a factor (Fahey and O'Connell, 1999). If the financial circumstances of the tenant improve, the rent is increased but the household is not required to leave the dwelling or neighbourhood. Dwellings provided by AHBs are subject to similar conditions in terms of rent-setting.

Aside from provision of local authority or AHB owned accommodation, social housing is also delivered by a system of subsidisation of units owned by private landlords, via a variety of specific schemes. Firstly, the Social Housing Current Expenditure Programme (SHCEP) (formerly known as the Social Housing Leasing Initiative) provides financial support to local authorities and Approved Housing Bodies (AHBs) for the long-term leasing of accommodation from private owners so that it can be used to accommodate households from local authority waiting lists. Again, the landlord is the local authority and the tenancy is secure for the term of the lease which can last from ten to 20 years.

Table 1: Forms of Housing Support for Low-Income Households

Name	Description	Administered by
LA completions & acquisitions	Dwellings owned by the local authorities through direct build or acquisition under Part V of the Planning & Development Acts 2000-2015) or otherwise (e.g. purchase of second-hand dwellings). Such dwellings constituted approximately 56 per cent of socially supported housing in 2016.	LA (DHPLG)
AHB completions & acquisitions	Dwellings owned by the Approved Housing Bodies (AHBs). These are organisations with charity status; AHBs have been required to register tenancies with the Residential Tenancies Board since 2015. Such dwellings constituted approximately 12 per cent of socially supported housing in 2016.	Charity, registered with RTB

Table 1: Forms of Housing Support for Low-Income Households (Contd.)

Name	Description	Administered by
Local authority or AHB long- term leased dwellings	Dwellings acquired on a long-term lease by the local authorities or AHBs and let to households assessed by local authorities as in 'housing need' (i.e. on the 'waiting list'). Funded by the DHPLG through the Social Housing Current Expenditure Programme (SHCEP, formerly known and the Social Housing Leasing Initiative). Leases can last from ten to 20 years (ten to 30 years for leasing by AHBs) or a Rental Arrangement of up to ten years may be put in place. AHBs may lease units they own to the local authorities.	LA & AHBs. Funded by DHPLG
Mediumto long-term financial support for renting in private sector (RAS)	The Rental Accommodation Scheme (RAS), introduced in 2004, provides housing via the private market for long-term Rent Supplement (RS) recipients that were assessed as needing social housing. RAS is delivered by LAs which source accommodation from the private market and enter into a tenancy agreement with the landlord and the RAS recipient. There are tenancies which are linked to the current tenant only and there are also agreements based on availability over a defined period, typically four years. The LA makes a monthly payment to the landlord linked to market rates (typically 8 per cent lower than market rate, to represent the level of risk transferred to the LA). The tenant pays differential rent to the LA, which takes account of their ability to pay. Each contract includes a periodic rent review, typically every two years. As the RAS is now deemed to be a social housing support, LAs retain the responsibility to source further accommodation for a RAS household, should the dwelling become unavailable through no fault of the tenant. Households may source alternative accommodation themselves, subject to it meeting their needs and conforming to standards for rental accommodation. RAS will be gradually replaced by HAP. RAS and HAP units (see below) together constituted approximately 15 per cent of socially supported housing in 2016.	LA, DHPLG

Table 1: Forms of Housing Support for Low-Income Households (Contd.)

Name	Description	Administered by
Medium- to long-term financial support for renting in private sector (HAP)	Housing Assistance Payment (HAP) was introduced to replace long-term RS and RAS. Like RAS, dwellings are provided through the private sector, the tenant must be assessed as being in housing need, the rent (which is subject to limits depending on the area) is paid directly to the landlord by the LA and the tenant pays the relevant 'differential rent' to the LA. HAP tenants may take up full-time employment while retaining the support. RS recipients who are assessed as being in long-term 'housing need' will be transferred to the HAP on a phased basis. Tenants source their own accommodation and once approved	Local authorities, DHPLG
Short-term financial support for renting in private sector (RS)	Rent supplement (RS), first introduced in 1977, provides financial support to existing private sector tenants with a short-term difficulty in affording rent. The tenant must have been living in the rented accommodation (or homeless accommodation) for at least six months of the last year; have been able to afford the rent at the beginning of the tenancy and have difficulty affording it now due to a substantial change in circumstances (e.g. unemployment). Administered by the Department of Employment Affairs and Social Protection, RS is typically paid to people in receipt of a social protection payment and those in full-time employment are not eligible. RS tenancies constituted approximately 18 per cent of socially supported housing in 2016.	Department of Employment Affairs and Social Protection (DEASP)

Source: Websites of Department of Housing, Planning, Community and Local Government; Department of Employment Affairs and Social Protection; Citizen's Information.

The Rental Accommodation Scheme (RAS) and Housing Assistance Payment (HAP) are similar programmes designed to house people assessed as in long-term housing need (i.e. on the local authority housing waiting list) in privately rented accommodation. In many respects, the local authority acts as an intermediary, making payments on behalf of tenants directly to landlords. Subject to area-specific rent ceilings, the local authority pays rent directly to the landlord and the recipient pays a rent contribution to the authority, with the amount of contribution depending on their assessed income and ability to pay, based on the relevant differential rent scheme. A difference between RAS and HAP is that RAS is an allocated tenancy,

while HAP tenancies are sourced by the tenant. Should a RAS tenancy come to an end, the local authority must source alternative accommodation; this is not the case for HAP tenancies. In both cases, however, tenant and private landlord relationships and obligations are protected by Residential Tenancies legislation. For example, in the case of RAS, if the local authority and owner contract comes to an end the Residential Tenancies Act endures which means that the tenant's position is secured. Policy is for HAP to, in time, replace RAS and also to replace the Rent Supplement scheme for people assessed as having a long-term housing need.

The Rent Supplement (RS) Scheme is a means-tested payment under the Supplementary Welfare Allowance Scheme administered by the Department of Employment Affairs and Social Protection. RS tenants are responsible for sourcing their accommodation. It was intended as a short-term payment for people living in private rented accommodation who were welfare dependent and who could not provide for the cost of their accommodation from their own resources. The Supplementary Welfare Allowance Schemes were managed by the Community Welfare Officers through the Health Boards, but funding comes through the Department of Employment Affairs and Social Protection. The number of private sector tenants supported by the scheme rose very rapidly during the 1990s. Bacon et al. (1999) noted the rapid rise in expenditure on rent supplementation under the Supplementary Welfare Allowance Scheme, from the equivalent of €18.1 million in 1991 to €111 million for 1998. Expenditure on RS increased further during the 2000s and 2010s, rising to €369 million by 2005 and €516 million by 2010. By 2014, the expenditure on RS had dropped back a little to €338 million. This was partly due to the improving economic situation but also due to the gradual transfer of long-term RS recipients to the RAS administered by the then Department of the Environment.

Gradually, since 2014, long-term recipients of Rent Supplement are being transferred to HAP. To be eligible for HAP, a household must first be approved for social housing support by the local authority. If the household is on the local authority housing waiting list it is eligible for HAP, regardless of whether it is in receipt of Rent Supplement.

Households benefitting from RAS or HAP payments are considered to have their housing needs met, but this is not the case for RS recipients. If they are assessed as having a long-term housing need, the plan is to transfer them to HAP, assuming the landlord is willing to give the requisite undertakings.⁷

3.1 Social Housing Output

Figure 3 shows the change since 2004 in social housing outputs under the remit of the DHPLG. From Figure 3, we can clearly see the rise in 'traditional' local

⁷ The landlord must undertake to register with the Residential Tenancies Board, comply with standards for rental accommodation and be tax compliant. There are upper limits to the rent payable, depending on the rental market in the locality and the number of people in the tenant's household.

authority housing (units built or acquired by the local authorities and rented directly to tenants) between 2004 and 2007, with an average of about 5,400 new units per year in this period. At the same time, the AHBs provided an average of over 1,400 units per year. This combined annual average of nearly 7,000 units per year fell precipitously to fewer than 1,000 units by 2013 and 2014. Although it rose again by 2017, the combined total remained under 3,000 per year.

HAP (incl. transfers from RS) RAS, SHCEP (incl AHB) AHB completions /acquisitions LA completions, acquisitions Annual outpur in '000s units 6 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

Figure 3: Social Housing Delivery, 2004-2017 (in '000, Additional Units per Year)

Source: Department of Housing, Planning and Local Government, Overview of activity under social housing provision programme by year, http://www.housing.gov.ie/housing/social-housing/social-and-affordble/overall-social-housing-provision [downloaded 18/6/2018]

Note: Rent Supplement is not shown in this Figure, however HAP includes a considerable volume of transfers from Rent Supplement. LA completions/acquisitions includes new build local authority homes, acquisitions by local authorities of new and previously owned dwellings; and some units acquired under Part V, Planning and Development Acts 2000-2017.

The growth in the role of the private sector, which had begun in the boom years through the RAS programme, accelerated during the recession. RAS and SHCEP combined accounted for over 5,000 new units per year mid-recession (in 2010 and 2011) before falling to about 2,600 by 2011. Since 2014, the main emphasis has been on provision through the Housing Assistance Payment, which is gradually

replacing RS. This accounted for over 12,000 units in 2016, although a substantial number of these were transfers from RS.⁸

While rent levels fell during the recession, they have increased, in some areas, just as rapidly with the return of economic growth, which has had financial implications for the State due to the role of the private sector as a source of social housing. The Residential Tenancies Board Rent Index, which adjusts rental rates for the mix of accommodation types, shows that prices started to increase in Dublin in mid-2011 and outside Dublin in late 2012. In Q1 of 2018, rents were growing at 7.1 per cent annually and had reached a level 7 per cent higher than the peak in late 2007 (RTB, 2018). However, the annual rates of increase have lessened from a peak of 9.3 per cent in Q4 2015, perhaps due to the introduction of rental market price controls in the form of the Rent Pressure Zone measure.

3.2 Social Housing Stock

The previous figure focused on new units added each year. Figure 4 (and Appendix Table A.3) show the estimated total stock of housing supported under each broad category of scheme between 2004 and 2016. This allows us to add the number of RS recipients at the end of each year to get a more complete picture of the contribution of the private sector. A narrow definition of social housing would focus solely on housing provided through local authorities or AHBs. Two developments suggest a broader understanding of social housing. Firstly, the growth in the use of rental market subsidies since 2004 and, secondly, the extension of the DHPLG's policy oversight role over all long-term rental market subsidies.

Figure 4 shows that even when we take account of RS recipients and HAP, and despite the fall in new output in the traditional local authority housing sector during the recession, this form of social housing still accounts for a very sizeable proportion of the total with the number of units approximately 140,000 in 2016. Provision by the AHBs has also increased very substantially to an estimated total of 30,000 in 2016.

As noted earlier, the number of RS recipients increased very dramatically indeed with the recession, reaching a peak of 97,000 in 2010 and 2011. The reduction after this period was partly accounted for by the greater use of the RAS/HAP schemes for long-term RS recipients who qualified to be included on the housing lists. The number of RS recipients fell to about 49,000 by 2016 while the number of RAS/HAP recipients rose from about 17,000 in 2011 to about 37,000 in 2016. The combined total number of supported private sector rentals peaked at 114,000 in 2011 and fell in 2013-2014 to 87,000. While the improving economic circumstances after 2013 would tend to reduce the numbers in need of housing support as they move into employment, the overall undersupply of housing and resultant challenges to affordability, kept the total numbers of recipients of support

^{8 3,568.}

for private sector renting at a fairly constant level thereafter (87,000 to 86,000 from 2014 to 2016). The weak private sector supply and the recent reliance on the same sector for the supply of social housing are likely to have contributed to the growth of homelessness.

RAS/HAP Rent supplement **AHB** units LA units '07 '09 '10 '11 '12 '14 '16 '04 '05 '06 '13 '15 RAS/HAP Rent supplement AHB units LA units

Figure 4: Estimated Social Housing Units, Broadly Defined, 2004-2016 (in '000 units)

Source: See Appendix Table A.3 for sources. *Note:* Rent Supplement is shown in this figure.

The population was increasing in the period, however, so it is useful to look at the extent to which the level of provision tracked changes in the population. This is shown in Figure 5 which shows the two broad categories of provision (rental through the local authority/AHB and supported renting in the private sector) as a percentage of the estimated total number of households.

This exercise shows that, as a proportion of all housing, the total social housing stock in the form of local authority or AHB rentals remained remarkably stable in the period ranging from just over 9 per cent to just over 10 per cent. It was supported renting in the private sector that expanded during the recession from just over 4 per

cent of housing in 2007 to about 7 per cent by 2010-2011 before falling back to 5 per cent by 2016. By the end of the period, supported private renting accounted for about one-third of social housing broadly defined, virtually unchanged compared to 2004.

11% Social housing as % of housing 10% 9% 8% 7% 6% 5% 4% 3% Local Authority & AHB 2% RS, RAS & HAP 1% 0% 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016

Figure 5: Socially Supported Housing Units, 2004-2016 (as % of Households)

Source: See Appendix Table A.3 for sources for social housing stock. Total number of households from Census tables with interpolation for inter-censal years.

Note: Rent Supplement is shown in this Figure.

3.3 Profile of Local Authority and AHB tenants

Before moving to the issue of the quality of social housing, we draw on the Irish SILC data to examine the profile of social housing tenants and how this might have changed over time. Here we focus on those in local authority or AHB housing (LA/AHB tenants) because it is not possible to fully identify recipients of support for renting in the private sector in the SILC data.⁹

Since those in local authority housing will, by definition, have low incomes, we examine their profile in terms of social risk group. Social risk groups are groups that differ in their risk of poverty and deprivation because of personal or family resources and responsibilities that, even apart from the skills or work experience they have, have an impact on their capacity to earn enough to reach an adequate standard of living. The kinds of personal and family resources in question are;

⁹ The number of RS, RAS and HAP recipients identified in SILC suggests that not all of them are identified in the survey.

disability, responsibility for caring for children, with and without the support of a partner, and broad life-cycle stage. Life-cycle is a factor for younger and older households; young adults can face a challenge in terms of entering the labour market whereas older adults are expected or required to retire from employment. The categories we use are listed below. The categories are mutually exclusive, and people who might fall into more than one category (e.g. lone parents with a disability) are classified according to the first named category into which they belong.

- Lone parent families, where the householder is an unpartnered parent of at least one child under 18.
- Working-age disability where the householder is a working age adult with a disability who may or may not have children.
- Large family with children where the householder is a partnered parent of at least three children under 18.
- Small family with children, where the householder is a partnered parent of one or two children under 18.
- Age 18-30, no children: the householder is a young adult who may or may not have a partner but has no children under 18.
- Age 31-65, no child aged under 18: the householder is an adult over 30 but under 66 who may or may not have a partner and has no children under 18. Note that they may have children over 18. This is regarded as the reference group since the adults do not face barriers to labour market participation associated with disability, family responsibilities or life-cycle stage.
- Older adult the householder is age 66 and over (including partnered and unpartnered adults).

Figure 6 show the composition of LA/AHB households in terms of these categories. The data are at household level, unlike most of the analysis of SILC in the following section which is at individual level. Turning first to the boom years (2004-2007), we see that over half of LA/AHB households were either lone parent families (30 per cent) or working age adults with a disability (who may or may not have had children). Couple families with children made up a relatively small share of LA/AHB households – just 7 per cent were families with three or more children and a similar proportion were families with one of two children. Virtually none of the householders were young childless adults. Fourteen per cent were adults aged over 30 but under 66 with no children under 18. They may have had older children, although an examination of the size of these households indicated that two-thirds had just one or two adults. A slightly larger proportion of tenancies (17 per cent) were headed by older adults.

When we turn to the recovery years, which capture the impact of changes associated with the recession as well as changes in policy and the housing market in that period, we see that the biggest change is the increase in the proportion of LA/AHB households in the group aged 31-65 with no children under 18. This increased from 14 per cent to 21 per cent of the households. The other group that increased as a share of LA/AHB tenancies was small couple families with 1-2 children under 18 (from 7 to 11 per cent). Large families remained at about 7 per cent of the total but the other groups fell slightly as a share of LA/AHB tenants.

Boom (2004-2007) Recovery (2013--30% -20% 0% 20% 30% 40% 30% 25% Lone parent family 25% 21% Working age disability Large family with children 7% Small family with children 7% 11% 0% Age 18-30, no child <18 Age 31-65, no child <18 21% 17% 14% Older adult

Figure 6: Profile of LA/AHB Households in Boom and Recovery

Source: SILC data for Ireland, analysis by authors; weighted, household level, classified on basis of householder characteristics.

A more detailed look at the group age 31-65 with no children revealed that in the recovery years, two-thirds were over age 50, slightly over half were female, and the proportion with just one person in the household rose from under one-third in the boom years to just over 40 per cent in the recovery. The social profile of this group was quite disadvantaged with nearly three-quarters in the lower social categories in the recovery period.

In summary, local authority tenant households include a relatively large proportion of lone parent households and other households regarded as at risk of poverty or deprivation. In recent years the proportion of local authority tenant households aged 31 or over without children seems to have grown considerably.

IV HOUSING QUALITY BY TENURE – AN ANALYSIS OF SILC DATA

Given the greater role played by renting in the private sector in providing low-income housing, it is important to ask whether this has had any implications for housing quality. This is particularly of interest in the context of the implementation of a series of regulations related to rental housing in the interim and in the context of higher levels of dissatisfaction reported by renters in 2007. There has also been a large increase in the proportion of the population living in privately rented accommodation in the period.

We draw on the Irish Survey on Income and Living Conditions (SILC) to examine the relationship between housing tenure and housing quality. What is the relationship between housing tenure and housing quality and has this changed since the start of the recession? SILC is an annual survey conducted in Ireland by the Central Statistics Office with the purpose of providing data on household income and living conditions. It is based on a national probability sample of dwellings, with the completed sample weighted to represent the full population in private households. SILC is a rotating panel survey, which means that part of the sample is followed from one year to the next for a maximum of four years. Although we do not make use of the panel element of the data here, it is significant because there is likely to be a loss of more mobile populations (such as younger adults and private sector renters) over time. Compared to Census 2016, figures suggest that those who own the accommodation outright are over-represented in SILC while those purchasing on a mortgage and private renters are under-represented. On the other hand, combining those renting from a local authority and those renting from AHBs, the percentage renting the traditional type of social housing is about right (see Appendix Table A.1).

Table 2 shows the indicators of housing quality which are based on the assessment of the householder: no central heating, no double glazing, dampness or leaks, dwelling too dark and noise from neighbours or the street. A dwelling is considered to have quality problems if it has two or more of these issues.

Figure 7 shows the evolution of the five items over time and also the change in the overall quality scale (having two or more of the five quality problems). The percentage of people living in dwellings with two or more quality problems fell from 16 per cent in 2004 to 9 per cent in 2015. In general, then, there was an improvement in housing quality over the period from 2004 to 2015.

An examination of the individual items shows that it was the item on single glazing that changed the most. In 2004, just over one-quarter of the population lived in dwellings with single glazing. By 2015, this had fallen to just 6 per cent. Perhaps related to improvements in glazing, problems with noise from the street or from neighbours also improved in the period, falling from 12 per cent in 2004 to 8 per cent by 2015. There were also some improvements in the percentage of people

Table 2: Indicators of Housing Quality

Domain	Items				
Quality	No central heating: Is your dwelling heated by?				
Problems	(1. Central Heating; 2. Other fixed heating (e.g. Stoves,				
(two of more	fireplace(s)); 3. Portable heating (e.g. Superser heater(s)				
of five	or similar); 4. No heating at all). 'No central heating'				
problems)	if not code 1.				
	No double glazing: Does the dwelling have any or all of the				
	following double/triple glazing? (1 Yes; 2 No).				
	Damp : Do you have any of the following problems with your				
	dwelling/accommodation - a leaking roof? - damp				
	walls/floors/foundations - rot in window frames or floor?				
	(1 Yes; 2 No)				
	Dark : Is your dwelling too dark, meaning is there not enough daylight coming through the windows? (1 Yes; 2 No).				
	Noise : Is noise from neighbours or noise from the street (traffic, business, factories etc.) a problem for your household? (1 Yes; 2 No).				

Source: CSO Survey on Income and Living Conditions, Questionnaire Manuals.

living in dwellings with central heating. The percentage of people lacking central heating in their homes fell from 9 per cent to 7 per cent. There was less change evident in the percentages of people living in dwellings with problems of leaks/dampness (about 13 to 14 per cent in the period) or problems with insufficient light (about 6 per cent).

Both quality problems and tenure vary with the age of the dwelling, so we would expect to see quality problems to differ by tenure. Table 3 shows the distribution of dwellings of different ages across tenure types and the percentage of dwellings in each age category that have two or more housing quality problems.

The last column shows that the older dwellings are more likely to have quality problems, with a rate of 23 per cent for the pre-1940 dwellings, 9 to 13 per cent for those built between 1941 and 1990 and 5-6 per cent for those built in 1991 or later.

Rent-free dwellings are the oldest, with nearly one-third built before 1940, followed by those owned outright (nearly one-quarter built before 1940). Dwellings that are owned outright are least likely to have been built since 2001 (just 3 per cent), which partly reflects the length of time needed to pay off a mortgage. The newest dwellings, with nearly one-third built since 2001, are those being privately rented followed by those being purchased on a mortgage (about one-fifth built since 2001). Local authority rented dwellings occupy an intermediate position, with the smallest percentage built before 1940 (6 per cent) and 17 per cent built after 2001.

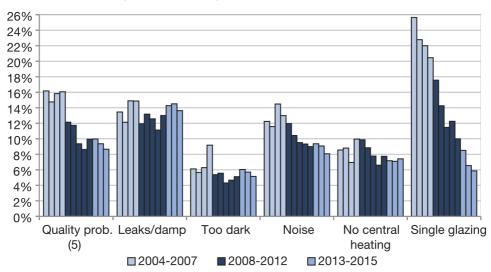


Figure 7: Housing Quality Problems by Year

Source: SILC data for Ireland, analysis by authors; weighted, individual level.

Table 3: Distribution of Dwelling Ages (Year of Construction) by Tenure and Quality Problems by Dwelling Age

Year constructed	Own outright %	Own with mortgage %	Local authority %	Private renter %	Rent free %	% with 2+ quality problems
Before 1940	23	11	6	17	32	23
1941-1970	23	16	17	9	16	13
1971-1980	23	15	22	10	12	9
1981-1990	18	15	20	13	11	10
1991-2000	10	23	19	20	17	6
2001 or later	3	20	17	31	12	5
Total	100	100	100	100	100	

Source: SILC data for Ireland 2004-2015, analysis by authors; weighted, individual level. *Note:* Weighted.

Figure 8 shows the breakdown of the quality problems by housing tenure, showing an average over the period 2004-2015. Renters, particularly local authority tenants, fare worst in terms of quality problems. Among local authority renters, for instance, 25 per cent report two or more quality problems and the figure is 17 per cent for private sector renters compared to just 11 per cent for those who own the accommodation outright and 6 per cent for purchasers.

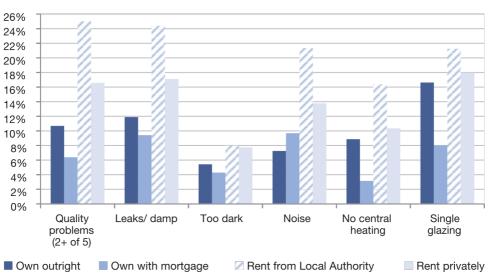


Figure 8: Housing Quality Problems by Tenure

Source: SILC data for Ireland, analysis by authors; weighted, individual level. *Note*: Rent Supplement is shown in this figure.

Local Authority renters have the highest rates of four of the specific quality problems: 24 per cent have problems with leaks or dampness; 21 per cent have problems with noise; 21 per cent lack double glazing and 16 per cent lack central heating. On the fifth item, insufficient light/too dark, local authority and private renters are about equally likely to experience problems (8 per cent). 10

V CHANGE IN HOUSING QUALITY BETWEEN 2004 AND 2015

At this point, we draw on a statistical model to examine the change between 2004 and 2015 in the overall quality of dwellings by tenure, as measured by our five indicators (leaks/dampness, darkness, noise, lack of central heating and single glazing. The descriptive results suggested that the overall quality of housing had improved in that time, with particularly noticeable improvements in the introduction of double or triple glazing, but also in central heating, and in terms of noise problems. In this section, we ask whether this overall improvement occurred for dwellings in each tenure type. We are particularly interested in whether the improvements occurred for rented dwellings. Given the increased use on the private rented sector for the supply of housing to low-income individuals and families, the quality of dwellings in this sector is also of concern. The statistical model is shown in Appendix Table A.4.

¹⁰ The figure for the percentage of dwellings lacking central heating is higher in SILC than in Census 2016, due to the use of different question wording.

Figure 9 shows the overall differences in the percentages of people living in dwellings with two or more of the five quality problems by tenure, period and income category. For period, we distinguish four periods: Boom (2004-2008); Early recession (2008-2009); Late recession (2010-2012) and Recovery (2013-2015). The prevalence of quality problems declined, particularly in the first two periods which stretch from 2004 to 2009, with relative stability since then.¹¹

Income is measured in quintiles of equivalised disposable income. ¹² That is, we take income after tax and compulsory social insurance deductions and adjust it to take account of household size and composition to get equivalised disposable income. We then sort households by rank order of their equivalised disposable income before being divided into five groups or quintiles of equal size. Since there are very few local authority renters in the top two quintiles, and since differences in quality are more salient at the lower end of the income distribution, we combine the top two quintiles. When it comes to tenure, we focus on four groups: those who own the home outright (owners), those purchasing the home on a mortgage (buyers), those renting from the local authority or Approved Housing Body (LA renters) and those renting from a private landlord (private renters). The small group of people living in their accommodation rent-free (just one per cent of persons in SILC) is not included in this analysis.

30% 25% 25% 20% 20% 17% 16% 15% 15% 12% 11% 11% 9% 9% 10% 6% 7% 5% LA renter Tenure 0% Private renter arly recession ate recession Middle fifth Recovery Lowest fifth ncome quintile op two fifths

Figure 9: Housing Quality Problems (two or more, or five) by Tenure, Period and Income Quintile

Source: SILC data for Ireland, 2004-2015; analysis by authors; weighted, individual level.

¹¹ This is consistent with figures from the Census which show the increasing prevalence of newer dwellings up until about 2011 but with relative stability in the proportion built since 1990 or since 1000 between 2011 and 2016 (see Appendix Figure A.1).

¹² The national equivalence scale assigns a weight of 1 to the first adult in a household, 0.66 to each subsequent adult (aged 14 or higher) living in the household and 0.33 to each child aged less than 14.

We address two questions based on the statistical model:

- Was the drop in quality problems over time found for all tenures? In particular, did the renters benefit as much as the owners?
- Are there differences between high-income and low-income renters in the private sector in terms of the quality of their accommodation? Did this gap get larger over time, as the dependence on the private sector for social housing increased?

The statistical model is described, and the estimates are set-out, in the Appendix. Drawing on the statistical analysis, Figure 10 shows the expected rate of housing quality problems by tenure in the boom (2004-2007), early recession (2008-2009), late recession (2010-2012) and recovery (2013-2015). The estimates control for income differences: they show the expected pattern by tenure and period if all tenures had exactly the same income distribution.

We can see from the figure that the rate of quality problems declined for all tenures with a particularly marked decline if we take the average of the boom and early recession for the two groups of renters: an expected drop of 11 percentage points for social housing renters and 9 percentage points for private renters. Since the rate of having two or more quality problems was lower for the owners and buyers, the drops are more modest but are statistically significant: 3 percentage points for both groups between the boom and early recession. Compared to the boom years, the reduction in quality problems over time was significantly larger for the two groups of renters than for the two groups of owners

On the face of it, then, it looks as though the quality of housing in the private rental sector has not declined – a smaller proportion of those living in this type of housing reported quality problems at the end of the period than at the beginning. In fact, the rate of quality problems at the end of the period for private renters was almost the same as that of owners at the beginning of the period. In Figure 10 we assumed that all groups had similar incomes. Of course that is not the case. In Figure 11, we focus on the change over time in the two rental sectors, distinguishing between high-income and low-income renting households. As detailed in the Appendix, this is estimated from the model with interactions (see Appendix Table A.4), but this explicitly examines the situation of high- and low-income renters.

Turning first to the results for private renters, we can see that the rate of quality problems is greater among the low-income tenants in all periods. However, the rate of quality problems reduced over time for both the low-income and high-income groups. The reduction was particularly marked in the earlier years of the period, with little change between the late recession and recovery. In fact, the reduction was greater for the lower-income tenants so that the gap between low and high-income tenants got narrower over time. The rate of having two or more quality problems was 13 percentage points higher for the lowest-income tenants in the

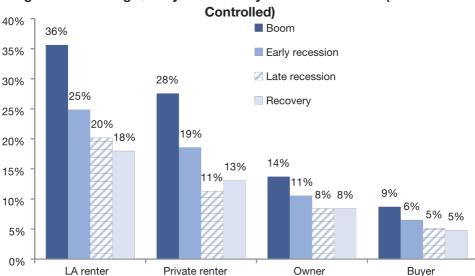


Figure 10: Housing Quality Problems by Tenure and Period (with Income

Source: SILC data for Ireland, 2004-2015; analysis by authors; weighted, individual level. *Note:* Estimated using the Stata margins command from model in Appendix Table A.4, on the assumption that all tenures had the same income distribution.

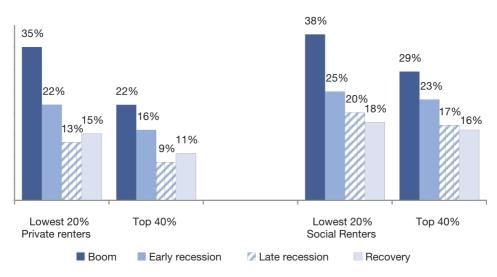
boom than for their high-income counterparts (35 per cent compared to 22 per cent) but this had narrowed to 4 percentage points by the recovery (15 per cent versus 11 per cent).

We see something similar for the social housing renters. The rate of quality problems appears to be greater for the low-income social housing tenants than for those with higher incomes. This may be a selection effect where social renters with high incomes will only remain in that sector if the quality of the accommodation is high. As we saw for private renters, the rate of quality problems fell over time for both the low-income and high- income groups with the main fall taking place early in the period. Again, the reduction in quality problems was greater for the lower-income tenants so that the gap between low and high-income tenants in the social housing sector also narrowed over time. The rate of having two of more quality problems was 9 percentage points higher for the lowest-income tenants in the boom than for their high-income counterparts (38 per cent compared to 29 per cent) but this had narrowed to 2 percentage points by the recovery (18 per cent versus 16 per cent).

Another point worth noting in the comparison between social and private renters is that the difference in the rate of quality problems is quite small when we control for income quintile. In the recovery period, for instance, there is only a 3 percentage point gap in the rate of quality problems between social and privately

rented accommodation for the lowest-income fifth (18 per cent and 15 per cent respectively).

Figure 11: Estimated Housing Quality Problems by Period for High and Low Income Renters



Source: SILC data for Ireland, 2004-2015; analysis by authors; weighted, individual level. *Note:* Estimated using the Stata margins command from model in Appendix Table A.4.

VI CONCLUSION AND DISCUSSION

In this paper, we sought to provide a broad overview of the social housing sector in Ireland and an examination of the quality of housing being provided through the private sector and the traditional local authority rented dwellings.

In terms of the general overview of the provision of social housing, perhaps the most striking aspect of policy change in recent decades has been the shift from a model of social housing support provision which was predominantly based on direct supply of local authority-owned housing units to a model in which a greater role has been given to the subsidisation of households renting in the private market. As noted above, this shift reflects policy changes which have taken place in other, similar economies, particularly the United States and United Kingdom, and have been motivated elsewhere by economic arguments favouring subsidisation of households as opposed to subsidised provision of dwellings, and by judgements concerning the broad successes and failures of public housing. However, it is important to note that, in recent years, the State has recommitted to an expansive

public building project under the Rebuilding Ireland policy; 33,000 units are scheduled for delivery, via construction, under Rebuilding Ireland.

In Irish circumstances, the shift toward a greater role for the rental market largely occurred during a period of intense economic pressure, which has undoubtedly amplified challenges. Policy choices may have been compelled by resource scarcity and other constraints. However, the question arises as to whether a reorientation toward market provision may have had some unintended consequences. Price inflation in residential rental markets in many urban areas has resulted in considerably increased expenditure on subsidised private market rental. It has also created challenges for recipients of Rent Supplement and HAP as their choice of properties to rent is limited to the extent that adjustments to the RS and HAP ceilings lag behind the rising prices of new rental properties. The decline in local authority output of publicly owned social housing post-2008 has resulted in the local authority system encountering difficulties in renewing output when required, although the delivery of local authority output is now accelerating.

Given these experiences, it may be appropriate to reconsider the question of optimising the channels by which social housing supports are delivered and the proportion of the total national housing stock which ought to be in public, or Approved Housing Body, ownership for long-term use as social housing. From the State's perspective, there could be advantages. Increased and sustained provision through the State and AHBs will provide a welcome degree of counter-cyclicality in housing output, thereby acting as a buffer during periods of the economic cycle. From this perspective, the recent reinvigoration of local authority housing output is welcome.

It would also be important to seek to address those arguments which have been made in favour of market provision, such as, for instance, the greater choice available to supported households in terms of choice of unit and the desirability of avoiding concentrations of disadvantage which have been associated with some local authority housing developments. It could well turn out that a mix of approaches may be best. It could also be the case that the optimal social housing support for a given household might depend on the characteristics of the household in question and the available supply in the area.

In the context of an increased use of the private sector, it is important to ask whether the quality of housing provided is adequate, or at least to understand how it compares to the quality of housing provided through the more traditional local authority renting route. We drew on the Irish SILC data for 2004 to 2015 to examine this issue in the second part of this paper. There are a limited number of self-reported housing quality indicators on SILC and we chose five of these to indicate the presence of housing quality problems: lack of central heating, lack of double or triple glazing, dampness/leaks, lack of sufficient light and noise from the neighbours or from the street. A dwelling was considered to have quality problems if it had two or more of these five issues.

There was an overall improvement in housing quality between 2004 and 2015, with the main improvement being a fall in the percentage of dwellings lacking double or triple glazing. The percentage of dwellings with noise problems also improved and there was a smaller improvement in other indicators. Quality problems are more prevalent in older dwellings so it should not be surprising that the large volume of new dwellings built since 2001, at least up until the end of the boom period, should contribute to an improvement in quality.

There are important differences in housing quality problems by tenure. Renters fare worst with one-quarter of social housing tenants on average over the period experiencing two or more quality problems and a figure of 17 per cent for private renters, compared to 11 per cent of owners and 7 per cent of purchasers. However, the improvement in housing quality benefitted all tenures and, in fact, benefitted the rental tenures even more, so that the quality gap between owners and renters narrowed.

The improvement in the condition of private rented stock is welcome. One might have expected the increase in demand for privately rented accommodation during the recession to be linked to an increased use of dwellings of marginal quality, resulting in an overall increase in quality problems. Strengthened regulation may well have borne fruit. However, quality challenges still persist, particularly when compared to owner occupied housing, and especially for low income households.

Even at the end of the period, analysis of SILC data indicated that there was a quality advantage for dwellings rented in the private sector compared to those rented by local authorities. This would amount to 5 percentage points fewer privately-rented dwellings having two or more problems than local authority dwellings, holding income constant, in the recovery period. The gap is smaller if we focus on the lowest income fifth. In this group, 15 per cent of private renters have 2+ quality problems compared to 18 per cent of local authority renters – a gap of just three percentage points. A good deal of the overall gap in quality between local authority and privately rented dwellings, then, is due to the presence in the latter tenure of a greater number of higher-income households. Of relevance to the quality of local authority dwellings is the introduction of the Energy Efficiency Retrofitting Programme, which commenced in 2013, and has improved the energy efficiency and comfort levels in local authority homes.

In terms of implications for housing policy, the results here point to improvements in quality over time that particularly benefitted renters, so that the traditional quality gap between home ownership and renting is narrowing. It points to the ongoing need for regular assessment of the quality of local authority dwellings and the implementation of a planned maintenance schedule for local authority housing stock. This will both improve the quality of housing for the tenants and also preserve the value of this important State asset.

The increased use of provision via the private sector to meet the needs of low-income households does not appear to disadvantage the tenants relative to local authority tenants in terms of the quality dimensions we examined here. Both rental tenures continue to lag behind owner occupiers in terms of quality; however, even when income is controlled, so more needs to be done in this regard.

In terms of future research, the SILC dataset has considerable potential for the examination of other issues relevant to social housing. A further paper in this volume examines the issue of housing affordability among certain tenure groups using the SILC dataset.

REFERENCES

- Adam, S., 2013. "Housing Taxation and Support for Housing Costs", in *Budget Perspectives*, Dublin: The Economic and Social Research Institute.
- Bacon, P., F. McCabe and A. Murphy, 1999. *The Housing Market: An Economic Review and Assessment*, Government of Ireland Publications.
- Blackwell, J., 1988. A Review of Housing Policy, Dublin: National Economic and Social Council.
- Blake, K. S., R. L. Kellerson and A. Simic, 2007. "Measuring Overcrowding in Housing", US Department of Housing and Urban Development. Available at: https://www.huduser.gov/publications/pdf/measuring overcrowding in hsg.pdf
- Brooke, S., 2014. "Social Renting: Outcomes and Outlook", in Sirr, L. (ed.), *Renting In Ireland*. Dublin: Institute of Public Administration.
- Byrne, D., D. Duffy and J. FitzGerald, 2014. "Household Formation and Tenure Choice: Did the Great Irish Housing Bust Alter Consumer Behaviour?" Dublin: Economic and Social Research Institute Working Paper.
- Central Statistics Office, 2009. "Survey on Income and Living Conditions (SILC): Housing Module", Dublin: Central Statistics Office.
- Collison, R., I. E. Gould and J. Ludwig, 2015. "Low-Income Housing Policy", National Bureau of Economic Research Working Paper No. 21071.
- Department of Public Expenditure and Reform IGEES Unit, 2017. "Spending Review 2017 Analysis of Current Expenditure on Housing Supports" (Unpublished Working Draft).
- Department of Social and Family Affairs, 2007. *Statistical Report on Social Welfare Services, 2006.*Dublin: Department of Social and Family Affairs.
- Department of Social Protection, 2013. *Annual Report: Statistical Information on Social Welfare Services, 2012*. Dublin: Department of Social Protection. http://www.welfare.ie/en/downloads/Social%20Stats%20AR%202012 Final.pdf
- Department of Social Protection, 2017. *Annual Report: Statistical Information on Social Welfare Services*, 2016. Dublin: Department of Social Protection https://www.welfare.ie/en/pdf/DEASP_Annual_Statistics_Report_2016.pdf
- DKM Economic Consultants, The Economic and Social Research Institute and Red C, 2014. *Private Rented Sector Survey Findings: Tenants, Landlords & Estate Agents*.
- Fahey, T. and M. Norris, 2010. "Housing", in Castels, F, S. Leibfried, J. Lewis, H. Obinger and C. Pierson, (eds.), *The Oxford Handbook of the Welfare State*. Oxford: Oxford University Press.
- Fahey, T. and B. Nolan, 2006. "Housing Expenditures, Housing Poverty and Housing Wealth: Irish Home Owners in Comparative Context" in Norris, M. and D. Redmond, *Housing Contemporary Ireland: Policy, Society and Shelter*, Dublin: Institute of Public Administration.

- Fahey, T. and C. O'Connell, 1999. "Local Authority Housing In Ireland", in Fahey, T. *Social Housing in Ireland*. Dublin: Oak Tree Press.
- Fahey, T. and M. Norris, 2011. "Housing in the Welfare State: Rethinking the Conceptual Foundations of Comparative Housing Policy Analysis", *International Journal of Housing Policy*, Vol. 11, No. 4, pp. 439-452.
- Fahey, T., 1999. "Introduction", in Fahey, T. (ed.), Social Housing in Ireland: A Study of Success, Failure and Lessons Learned, Dublin: Oak Tree Press.
- Fahey, T., 2004. "Housing Affordability: Is the Real Problem in the Private Rented Sector?", *Quarterly Economic Commentary*, Summer 2004, The Economic and Social Research Institute.
- Fahey, T., B. Nolan and B. Maître, 2004. *Housing, Poverty and Wealth in Ireland*. Dublin: Combat Poverty Agency.
- Gerlach-Kristen, P. and N. McInerney, 2014. "The Role of Credit in the Housing Market". Dublin: Economic and Social Research Institute Working Paper.
- Housing Agency, 2013. Summary of Social Housing Assessments 2013: Key Findings. Dublin: Housing Agency.
- Housing Agency, 2016a. The Regulation of Approved Housing Bodies (AHBs) in Ireland: 2015 Annual Report and Sectoral Analysis. Dublin: Housing Agency.
- Housing Agency, 2016b. "Summary of Social Housing Assessments 2016: Some Frequently-Asked Questions", Available online at www.housingagency.ie. Dublin: Housing Agency.
- Housing Agency, 2017. Summary of Social Housing Assessments 2017 Key Findings. Dublin: Housing Agency.
- Maître, B., H. Russell and C. Whelan, 2014. "Financial Stress in the Recession", (Technical Paper) Dublin: Department of Social Protection.
- McQuinn, K. and G. O'Reilly, 2008. "Assessing the Role of Income and Interest Rates in Determining Irish House Prices", *Economic Modelling*, Vol. 25, Nop. 3, pp. 377-390, May 2008.
- Norris, M. and N. Winston, 2003. Housing Policy Review, 1990-2002. Dublin: Stationery Office.
- Norris, M. and N. Winston, 2009. "Rising Second Home Numbers in Rural Ireland: Distribution, Drivers and Implications", *European Planning Studies*, Vol. 17, No. 9, pp. 1303-1322.
- Norris, M. and N. Winston, 2012. "Home-ownership, housing regimes and income inequalities in Western Europe", *International Journal of Social Welfare*, Vol. 21, No. 2, pp. 127-138.
- Norris, M. and P. Shiels, 2004. Regular National Report on Housing Developments in European Countries: Synthesis Report. Dublin: Stationery Office.
- Norris, M. and P. Shiels, 2007. "Housing Inequalities in an Enlarged European Union: Patterns, Drivers, Implications", *Journal of European Social Policy*, Vol. 17, No. 1, pp. 65-76.
- Norris, M. and T. Fahey, 2011. "From Asset Based Welfare to Welfare Housing? The Changing Function of Social Housing in Ireland", *Housing Studies*, Vol. 26, No. 3, pp. 59-469.
- Norris, M., 2005. "Social Housing" in Norris, M. and Redmond, R. (eds.), *Housing Contemporary Ireland: Policy, Society and Shelter*, Dublin: Institute of Public Administration.
- Norris, M., 2016a. Property, Family and the Irish Welfare State, London: Palgrave Macmillan.
- Norris, M., 2016b. "Varieties of Home Ownership: Ireland's Transition from a Socialised to a Marketised Policy Regime", *Housing Studies*, Vol. 31, No. 1, pp. 81-101.
- O'Callaghan, D., 2017. *Analysis of Current Expenditure on Housing Supports*. Dublin: Department of Public Expenditure and Reform (Working Paper). Downloaded from https://igees.gov.ie/wp-content/uploads/2015/02/Analysis-of-Current-Expenditure-on-Housing-Supports.pdf
- Olsen, E., 2001. *Housing Programs for Low-Income Households*. National Bureau of Economic Research Working Paper No. 8208.
- Pittini, A., L. Ghekière, J. Dijol and I. Kiss, 2015. *The State of Housing in the EU, 2015*. Brussels: Housing Europe, the European Federation for Public, Cooperative and Social Housing.
- Redmond, D. and M. Norris, 2007. "Social Housing in the Republic of Ireland", in Whitehead, C. and K. Scanlon (eds.), *Social Housing in Europe* London: LSE. pp. 118-129.

Residential Tenancies Board, 2017. *Annual Report – 2016*. Dublin: Residential Tenancies Board. Residential Tenancies Board, 2018. *Residential Tenancies Board Rent Index, Q1 2018*. Dublin: Residential Tenancies Board.

Scanlon, K. and C. Whitehead, 2007. "Social Housing in Europe" in Whitehead, C. and Scanlon, K. (eds.), *Social Housing in Europe* London: LSE, pp. 5-32.

Watson, D. and J. Williams, 2003. *Irish National Survey of Housing Quality 2001-2002*. Dublin: The Economic and Social Research Institute.

Whitehead, C. and K. Scanlon, 2007. Social Housing in Europe, London: LSE.

APPENDIX

Notes on Tenure in Different Data Sources

The figures from the census do not do a good job at replicating the known levels of provision by Local Authorities and Approved Housing Bodies. For instance, the Housing Agency reports 26,904 AHB social housing units under regulation in 2015 out of an estimated total of 30,000 units (Housing Agency, 2016a). Census 2016 records only 16,765 units as 'rented from a voluntary body'. Tigures from the Department of Housing record 137,937 Local Authority dwellings let to tenants in 2016 compared to 143,178 in Census 2016. The totals, taking local authority and AHB together, are closer, however, as shown in Table A.1.

Table A.1 shows the estimated number of dwellings (in '000s) occupied with each tenure from the Census of Population 2016, SILC 2015 and the QNHS 2016 and also the number of rental tenancies registered with the Residential Tenancies Board (RTB) in 2016.

From April 2016, tenancies in Approved Housing Bodies (AHBs) were also required to be registered (within one year) with the RTB. By the end of 2016, about 5,500 AHB tenancies had been registered. The tenancies registered with the RTB could be an overestimate of current tenancies. Since there is no requirement on landlords or tenants to let the RTB know when a tenancy has ended, and the tenancy does not have to be re-registered until four years after its last registration. (RTB, 2017). However, the RTB total for privately rented dwellings in 2016 is remarkably close to the 2016 Census figure of about 320,000 dwellings.

Table A.1: Estimates of Housing Tenure in 2015-2016 from Different Sources (in '000)

Tenure	Census 2016	QNHS 16	SILC 2015	RTB 2016	Local authority/ AHB** 2015
Own outright	634	1,215	744		
Own with mortgage	553		467		
Rent privately	320	308	272	319.9*	
Local Authority/AHB	166	161	167		167.9
Rent free	29	19	52		

Sources: Census of population, 2016; SILC 2015 (analysis by authors); QNHS 2016 (analysis by authors); RTB, 2017.

Notes: Total adjusted to an estimated 1,702 private households in 2016 according to Census 2016. * from RTB, 2017, and excluding 5,500 cases that were AHB tenancies registered with the RTB in 2016 in order to match the early 2016 figures from the Census. ** From DHPLG at http://www.housing.gov.ie/sites/default/files/attachments/401-la-units-annual_0.xlsx

¹³ Central Statistics Office table E1006, available at www.cso.ie.

The combined figure for local authority and AHB tenancies is fairly similar across the census for 2016, the QNHS for 2016 and the local authority and AHB figures combined from the Department of Housing, Planning, Community and Local Government (DHPLG). Figures from SILC and the QNHS are grossed up to the estimated total number of permanent private households from Census 2016.

The latest figures from SILC were for 2015 at the time of writing. Because of the smaller sample size than the QNHS, the figures are subject to a margin of error. Compared to the census, SILC seems to overestimate the percentage of households who own their homes outright and underestimate the number who own with a mortgage. The figures for renting from the local authority or AHB are very close to the census, but the estimated numbers renting privately is low (at 272,000 compared to 320,000). Some of these may be included in the 'rent free' category however – a group with an estimated 52,000 cases in SILC compared to 29,000 from the census

Social Housing Output and Stock

The first two columns of Table A.2 show the total number of new dwellings made available for renting through the Local Authorities and AHBs between 2001 and 2016. During the recession years, there was a dramatic fall in output which began to increase again only in 2015. The HAP scheme was also introduced in 2014 (see text for description). Many of the early HAP units were transferred from the Rent Supplement Scheme administered by the Department of Social Protection.

Table A.2: Social Housing Output Through Local Authorities and AHBs, 2004-2016 ('000s Dwellings Added Per Year)

Year	Local authority completed, acquired	AHB completed	RAS, SCHEP (including AHB)	НАР
2004	4.5	1.6	0.0	0.0
2005	5.1	1.4	0.5	0.0
2006	5.1	1.2	2.3	0.0
2007	7.0	1.7	2.9	0.0
2008	5.7	1.9	3.6	0.0
2009	4.1	2.0	4.4	0.0
2010	2.2	0.8	5.1	0.0
2011	0.8	0.7	5.4	0.0
2012	0.7	0.7	4.8	0.0
2013	0.5	0.2	3.9	0.0
2014	0.3	0.4	3.2	0.5
2015	1.2	0.4	3.3	5.7
2016	1.6	0.3	2.6	12.1

Source: https://www.housing.gov.ie/housing/social-housing/social-and-affordble/overall-social-housing-provision.

The estimated total number of socially supported housing units is shown in Table A.3. The broad definition includes units rented by the Local Authorities and AHBs as well as supported renting in the private sector through the Rent Supplement Scheme and the RAS and HAP schemes (see text for description).

Table A.3: Estimated Total Socially Supported Housing ('000 units), 2004-2016

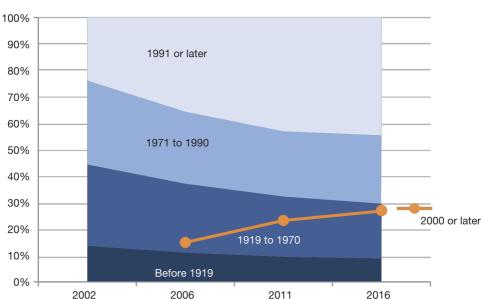
Year	Local Authority Unit ¹	AHB Units estimated) ²	Rent Supplement Units ³	RAS/HAP Unit ⁴	Total	Total as % of all households ⁵
2004	108.5	18.3	57.9	0	185	13
2005	109.8	19.7	60.2	0.5	190	13
2006	111.4	20.9	59.9	2.6	195	13
2007	114.1	22.6	59.7	5.1	202	13
2008	118.4	24.5	74.0	8.2	225	15
2009	120.6	26.5	93.0	11.3	251	16
2010	128.0	27.3	97.3	14.2	267	17
2011	126.0	28.0	96.8	16.8	268	16
2012	132.5	28.7	87.7	17.4	266	16
2013	133.7	28.9	79.8	20.2	263	16
2014	135.6	29.3	66.4	21.0	252	15
2015	137.9	29.7	57.0	27.0	252	15
2016	142.0*	30.0	44.5	36.8	253	15

Source: 1. From http://www.housing.gov.ie/sites/default/files/attachments/4o1-la-units-annual 0.xlsx

- 2. Taking Housing Agency figures for 2015 (estimated total of 30,000), subtracting completions by year.
- 3. From Department of Social Protection annual Social Welfare statistics 2006 and 2016.
- 4. Estimated based on DHPLG "Social Housing Output Overview".
- 5. Census of population figures on total number of permanent private households with intercensal interpolation.

Note: The numbers in this table are estimates based on available data.

* Total Local Authority rentals for 2016 estimated by adding the new builds, acquisitions, regeneration and voids to the 2015 total.



Appendix Figure A.1: Percentage of Dwellings Built in each Period by Year (Household Level)

Source: Census of Population Tables from www.cso.ie (downloaded January 24, 2018). Figures refer to permanent private households

Details of the Statistical Model

The statistical model is a logistic regression on the weighted data, with robust standard errors to take account of clustering (at household level) and weighting of the data. The model includes interactions between period and tenure, period and income, tenure and income. We also tested for three-way interactions between period, tenure and income but no more of these were statistically significant than would be expected to occur by chance, so we do not report them here. Logistic regression models with two-way interactions can be difficult to interpret since both main effects need to be taken into account as well as the interaction effect. To facilitate presentation, we use the model to estimate the expected rate of quality problems by tenure for the different periods and, within the private rental sector, by income.

Note for non-specialists on interpreting model results.

A logistic regression is a special type of regression that is used for binary outcome variables, such as whether a household reports a housing quality problem or not. Appendix Table A.4 presents two models used to analyse the relationships between tenure, time period and income, on the one hand, and the likelihood of reporting two or more housing quality problems, on the other.

The table reports odds ratios. If the reported odds ratio exceeds 1.00, then the likelihood of experiencing housing quality problems is increased relative to the relevant reference group. For instance, the Model 1 result shows that the odds of having housing quality problems are 2.26 times higher for local authority renters than for owners (the reference group), after we take account of income category and the time period.

Only those results which are statistically significant (which are marked with an asterisk in the table) are reliable.

Both models should be read alongside one another. Model 1 provides a parsimonious analysis, with a limited number of predictor variables. Model 2 introduces interactions between tenure and time, between tenure and income and between period and income. Most of these interaction terms are not statistically significant. The only ones which are significant are the interactions between being a renter and period, and between tenure and income. The interpretation of interaction effects is complex and is best done by looking at the expected combined impact of the factors, as we do in Figures 10 and 11.

Appendix Table A.4: Logistic Regression for 2+ Quality Problems (Odds Ratios)

		Model 1	Model 2 (Interactions)
Tenure	Purchasing	0.67***	0.86
(Ref: owner)	Local Authority	2.26***	5.30***
	Private Renting	1.73***	3.55***
Period	Early recession	0.69***	0.85
(Ref: Boom)	Late recession	0.50***	0.61***
	Recovery	0.49***	0.64***
Income	Lowest	2.46***	3.97***
(Ref: highest 40%)	2nd	2.04***	2.63***
	Middle	1.48***	1.82***
Tenure x Period intera	ctions (Ref: Owner, bo	oom)	
Buyer and	Early recession		0.95
	Late recession		0.94
	Recovery		0.86
LA renter and	Early recession		0.84
	Late recession		0.82
	Recovery		0.71*
Private renter and	Early recession		0.81
	Late recession		0.57***
	Recovery		0.67**

Appendix Table A.4: Logistic Regression for 2+ Quality Problems (Odds Ratios) (Contd.)

		Model 1	Model 2 (Interactions)				
Tenure x income interaction	Tenure x income interactions (Ref: Owner, top 2 quintiles)						
Buyer and	Lowest income quintile		0.86				
	Second		0.68*				
	Middle		0.79				
LA renter and	Lowest income quintile		0.37***				
	Second		0.49**				
	Middle		0.59				
Private renter and	Lowest income quintile		0.49***				
	Second		0.50***				
	Middle		0.74				
Period x income (Ref: I	Boom and top two quintiles)						
Early recession and	Lowest income quintile		0.75				
	Second		1.01				
	Middle		0.74				
Late recession and	Lowest income quintile		0.83				
	Second		1.09				
	Middle		0.98				
Recovery and	Lowest income quintile		0.77				
	Second		0.96				
	Middle		0.96				
Constant		0.11***	0.08***				

Source: SILC data for Ireland for 2004-2015, analysis by authors; weighted, individual level.

Note: * p<=.05; ** p<=.01; *** p<=.001. Number of cases = 155,879. Robust standard errors.