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Housing Provision in Northern Ireland and its Implications for Living Standards and Poverty

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HOUSING PROVISION IN NORTHERN IRELAND AND ITS IMPLICATIONS FOR LIVING STANDARDS AND POVERTY

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ABSTRACT

This paper aims to assess the sufficiency and affordability of housing in Northern Ireland and the implications which housing costs have for living standards. Looking at supply and demand there does not appear to be any misallocation between the regions of Northern Ireland in terms of overall housing provision. However, in assessing the sufficiency of different types of housing the evidence does show that there is a considerable shortage of supply of social housing in regions where demand is highest.

In terms of affordability, on average, housing in Northern Ireland appears to be relatively affordable. Yet, this paper shows that the living standards of particular groups at the margins are significantly impacted by housing costs. This is particularly the case for low income households in the private rented sector, who face a particularly high housing cost burden and a high risk of poverty. The evidence suggests that the social rented sector should be expanded to include these households, rather than seeking to intervene in the private rental market.

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HOUSING PROVISION IN NORTHERN IRELAND AND ITS IMPLICATIONS FOR LIVING STANDARDS AND POVERTY

1. INTRODUCTION AND OVERVIEW

In 2008 Northern Ireland experienced a housing crash which saw a dramatic fall in house prices and sustained slowdown in the growth of housing costs in the years that followed. This was similar to the experience of the Republic of Ireland and the other regions of the United Kingdom. Northern Ireland (NI) experienced some of the largest decreases in housing output, property values and rental values of any region of the United Kingdom (UK). In this sense, NI's experience bore a closer resemblance to that of the Republic of Ireland (ROI). However, whilst the experience of the crash may have been similar between both economies on the Island of Ireland, the recovery from that crash has been quite different.

The ROI has experienced a rapid increase in both property values and rental costs, with only a partial recovery in housing output. This has led to an affordability crisis which is now impacting on poverty rates, labour costs and even industrial development (Goldrick-Kelly and Healy, 2017; Hearne, 2017). The experience of recovery in NI has been considerably more muted. House prices have increased and rents have maintained a stable value, but there is no sign of a widespread affordability crisis in the NI housing market and certainly not one of the scale experienced in the ROI (Healy and Goldrick-Kelly, 2017).

Looking at supply and demand in NI there does not appear to any misallocation between sub-regions in terms of overall housing provision, but there is a possible mismatch between types of housing. Measuring the sufficiency of different types of housing is a complex task, but our analysis suggests that there is a considerable shortage of supply of social housing in regions where demand is highest. This is important in the context of evidence showing that housing tenure has changed dramatically over the last number of years. Private renting and outright ownership have increased significantly, whilst there has been a significant drop in the share of all tenures in the social rented sector or owned with a mortgage.

On the whole however, housing in Northern Ireland still appears to be relatively affordable. Yet, as analysis in this paper shows widely utilised measures of affordability can be blunt instruments to measure housing sufficiency. Thus, while housing may be relatively affordable for much of the population, this paper shows that particular groups can be significantly impacted by housing

costs. The evidence presented shows that this is particularly the case for low-income households in the private rented sector, who face a particularly high housing cost burden and also a high risk of poverty.

Section 2 begins by looking at the stock, supply and demand for housing across NI. It then looks at how housing tenure has changed over the 10 years since 2005/06 and what impact these changes have had on affordability. Section 3 goes on to examine how living standards are impacted by housing costs and the role that housing tenure plays here too. Finally, Section 4 looks at the policy implications of these results. Section 5 concludes.

2. AN OVERVIEW OF HOUSING IN NORTHERN IRELAND: HOUSING STOCK, SUPPLY AND DEMAND

2.1 Housing Stock

As Table 2.1 shows, in some respects NI is closely aligned with the regions of the UK in terms of housing stock but shares different features with the ROI. NI has a much lower number of dwellings per population; but has a higher rate of new dwellings both started and completed. The number of new dwellings started per population in the ROI is almost half that of NI, but all three regions are more closely aligned on completions.

Table 2.1: Housing Stock in Northern Ireland, Republic of Ireland and Great Britain, 2014/15

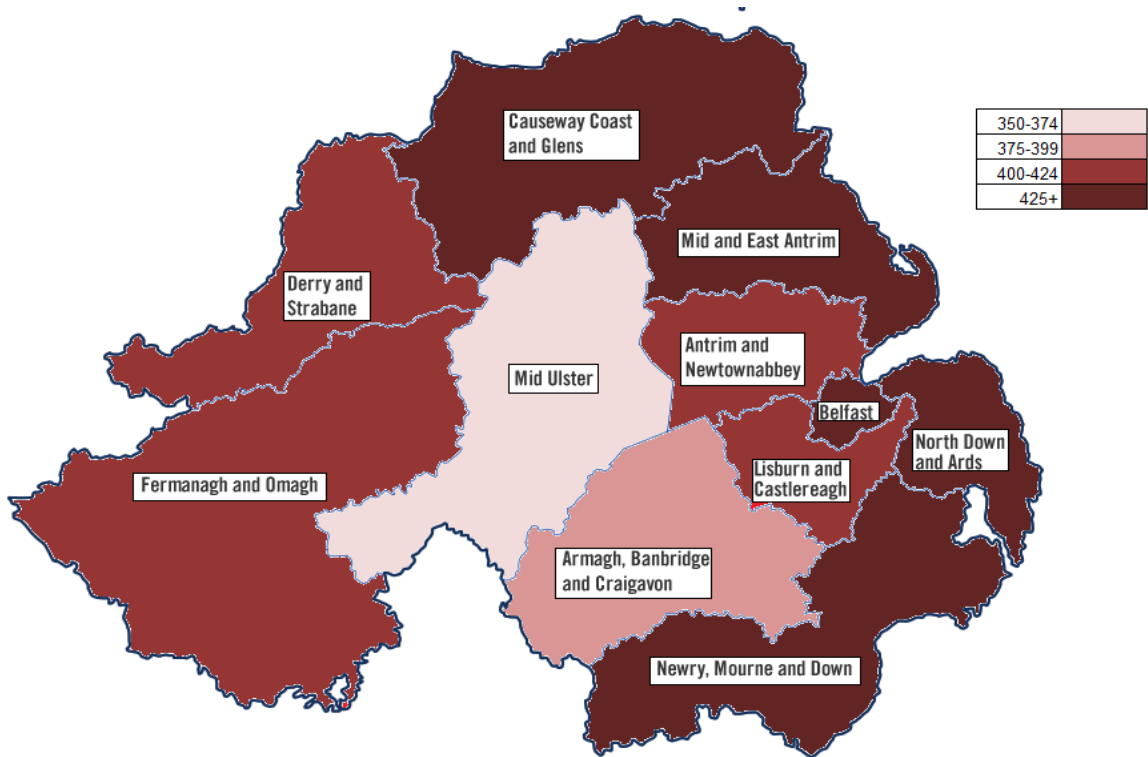
	NI	ROI	GB
Population (000s)	1,852	4,688	63,258
Total Housing Stock (000s)	771.1	2,022	27,498
Total Stock Per 1,000 Population	416	431	438
New Dwellings Started (000s)	7.0	8.8	167.5
New Dwellings Started Per 1,000 Pop	3.8	1.9	2.6
New Dwellings Completed (000s)	5.8	13.2	162.8
New Dwellings Completed Per 1,000 Pop	3.1	2.8	2.6

Source: NI Housing Statistics, NISRA (2017); Census 2016 Housing and Households, CSO (2018)

Note: Questions have been raised regarding the accuracy of Housing starts and completions in ROI see Goldrick-Kelly & Healy (2017)

The figures presented in Table 2.1 look at the overall stock in NI and of course 416 dwellings per 1,000 population is an average figure. Looking at the geographical spread of dwellings among the 11 council districts of NI, the average falls to a low of 362 dwellings in *Mid-Ulster* and is highest in *Belfast* at 459, closely followed by *Ards and North Down* at 440. Chart 2.1 shows the full spread of stock across NI with the eastern seaboard dominating the upper levels of dwelling density.

Chart 2.1: Number of Dwellings per 1000 Population by District Council Northern Ireland, 2017



Source: NI Housing Statistics, NISRA (2017)

In terms of the type of accommodation, detached houses are the most popular dwelling type, comprising 35.6% of the total. Terraced housing is the second most common form of housing, accounting for 29%, whilst apartments are the least common form of housing, comprising 10.6% of total housing stock. The housing stock in NI conforms to norms in that urban areas have a higher than average proportion of apartments and terraced houses, while rural areas tend to have more detached dwellings.

There are, however, a number of interesting sub-regional variations within the data. Whilst *Belfast* has double the average proportion of apartments, *Derry City and Strabane* council area is actually below the NI average for apartments, but significantly above it for terraced houses. *Fermanagh and Omagh* has the highest proportion of detached homes at almost 60% while *Lisburn and Castlereagh* have the largest proportion of semi-detached houses at 30%.

Table 2.2: Housing Stock in Northern Ireland by Type of Accommodation, 2016

	Apartment	Detached	S-Detached	Terrace
Antrim and Newtownabbey	11.0	33.6	26.2	29.3
Ards and North Down	10.8	36.6	27.7	24.9
Armagh, Banbridge and C'avon	5.0	42.5	23.7	28.9
Belfast	20.9	9.5	26.4	43.2
Causeway Coast and Glens	8.5	45.3	24.8	21.4
Derry City and Strabane	10.3	29.5	25.3	34.8
Fermanagh and Omagh	5.4	59.8	16.6	18.2
Lisburn and Castlereagh	9.3	37.9	29.9	22.9
Mid and East Antrim	9.8	39.8	21.8	28.6
Mid Ulster	3.7	54.2	21.7	20.3
Newry, Mourne and Down	6.6	47.9	23.7	21.9
Total	10.6	35.6	24.8	29.0

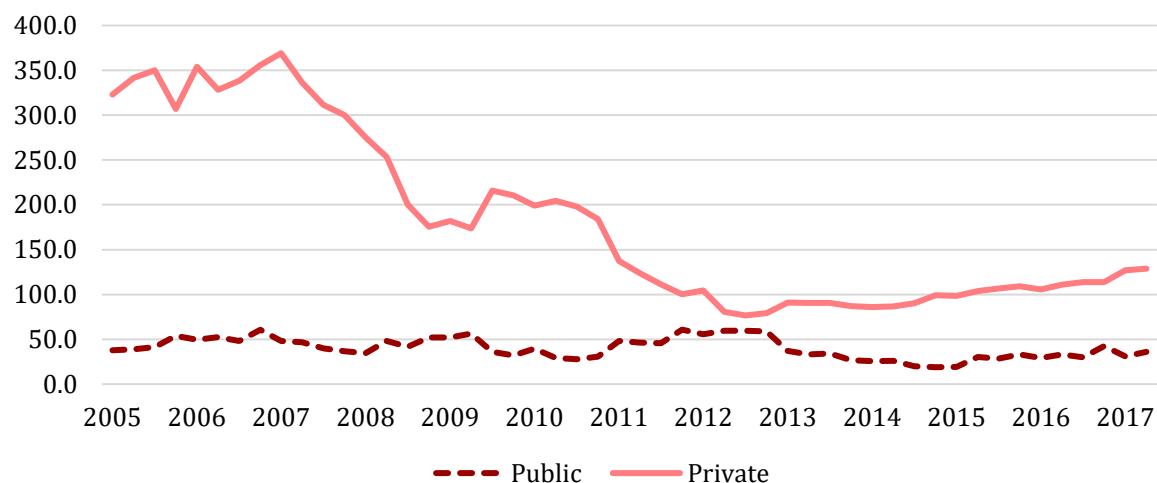
Source: NI Housing Statistics, NISRA (2017)

2.2 Housing Supply

Housing supply in NI has experienced a boom and bust similar to that experienced in the ROI. However, the trend of activity within both the public and private sectors in NI is quite different. The categorisation of new housing as public or private can be somewhat misleading. In contrast to the ROI and the other regions of the UK, local councils do not build houses in NI. This function was subsumed in to the Northern Ireland Housing Executive (NIHE) in 1971 due to concerns surrounding the provision of housing in NI. While the NIHE still manages the Social Housing Development Programme for NI, it has been constrained from building new stock since 2001/02 (Smyth, 2017), and thus new ‘public’ stock since then has been built by voluntary not-for-profit Housing Associations.

The figures for ‘public’ output outlined in Chart 2.2 thus outline new building by Housing Associations and a limited number of NIHE replacements of existing dwellings (Department for Communities, 2017). In the remainder of this paper however, tenants renting from the NIHE will be considered as *public* tenants whilst those renting from HAs will be considered *social* tenants. When it becomes necessary to group the two together, the combined group will be referred to a *social housing*.

Chart 2.2: Chained Volume of New Housing Output in Northern Ireland By Sector, 2005-2017 (2013=100)

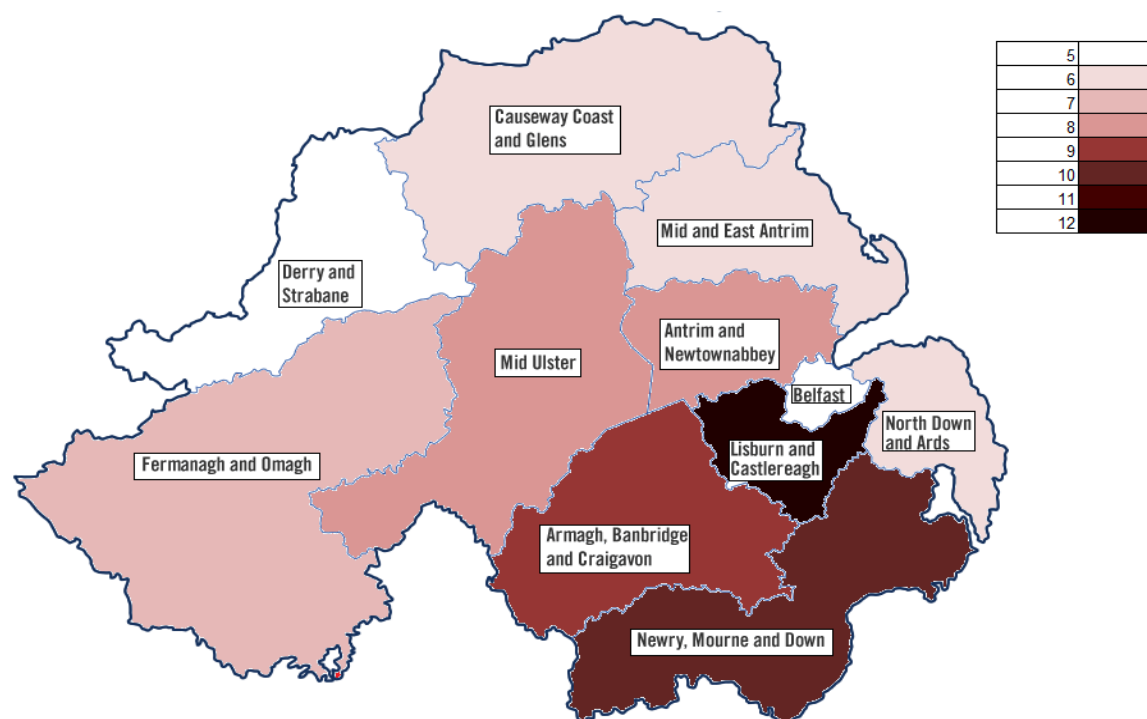


Source: Housing Stock Statistics, DoF (2018)

While housing output in the private sector has always exceeded public or *social housing* output the impact of the financial crisis in 2008 almost equalised output in both sectors. While private output has recovered somewhat since 2008, it is still 60% lower than it was in 2005. Public or *Social* housing output in contrast has remained relatively steady over the same period but is still 5% lower in 2017 than it was in 2005.

As Chart 2.3, shows the increase in the number of dwellings has not been uniform across the regions of NI. In particular the two main urban areas, *Belfast* and *Derry and Strabane* have seen the lowest percentage growth in new dwellings over the last 9 years at 5.7% and 5.9%, respectively, far below the NI average of 7.5%. *Lisburn and Castlereagh*, which would be considered to be a part of the *Belfast* Commuter belt had the highest growth at 12%, followed by *Newry, Mourne and Down*, and *Armagh, Banbridge and Craigavon*.

**Chart 2.3: Percentage change in number of dwellings (Public and Private) by District
Council Northern Ireland, 2008-17**



Source: Housing Stock Statistics, DoF (2018)

Table 2.3 shows the average number of new dwellings, either private or public, adjusted for population of each of the 11 local government districts, over the years 2015-2017. Whilst data are available for previous years, they are only available at district council level and the new stratification of local government districts is not directly comparable with its predecessor data set.

**Table 2.3: Average Annual Number of New Dwelling per 1,000 Population by Sector by
Local Government District, 2015-17**

Local Government District	Private	Social
Antrim and Newtownabbey	3.1	0.5
Ards and North Down	2.2	0.9
Armagh City, Banbridge and Craigavon	5.3	0.1
Belfast	1	0.9
Causeway Coast and Glens	3.6	0.4
Derry City and Strabane	1.9	1.2
Fermanagh and Omagh	2.6	0
Lisburn and Castlereagh	4.9	0.5
Mid and East Antrim	2.4	0.2
Mid Ulster	4.3	0.4
Newry, Mourne and Down	3.1	0.2

Source: Family Resources Survey, NISRA (2017)

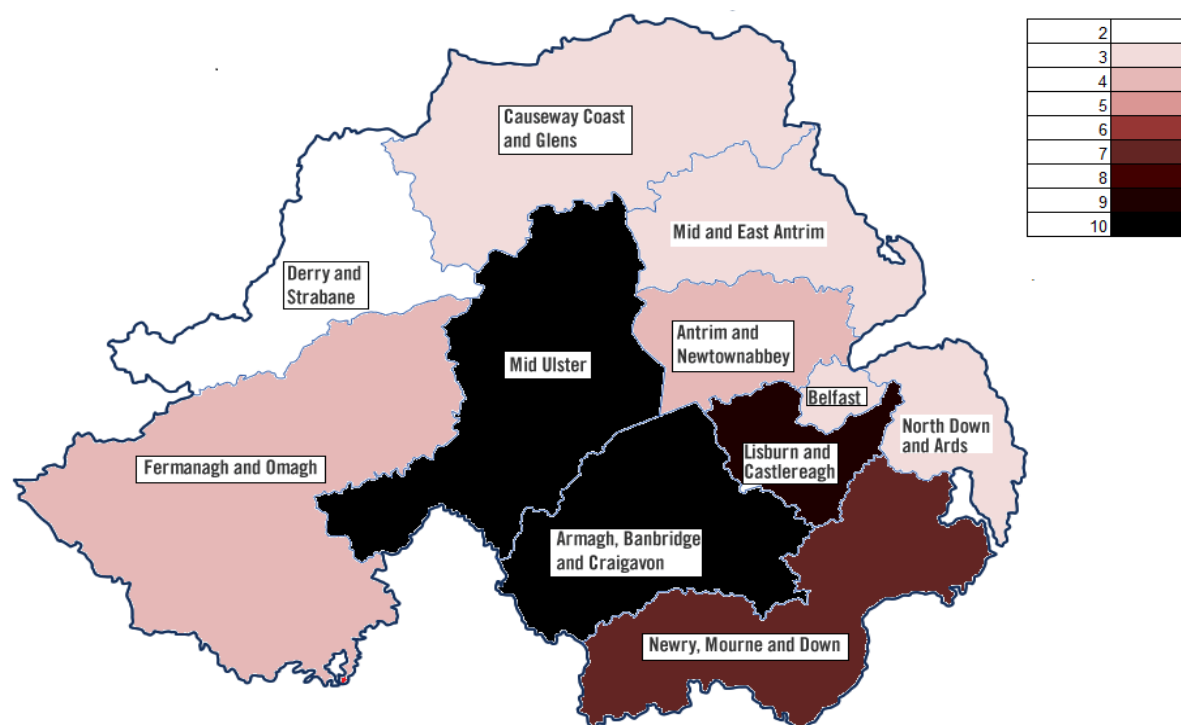
As Chart 2.2 shows private housing development has been roughly 2.5 times that of public or social housing output over the last two years. However, the regional pattern of that development has been quite varied. Although in all cases a greater number of private dwellings were built in all areas, some areas have seen a greater concentration of public or social builds. Armagh City, Banbridge and Craigavon has the largest increase in private dwellings per population from 2015-17 while Derry and Strabane have had the largest increase in social housing. Belfast is the only district where public and private new dwellings are approximately equalised.

2.3 Housing Demand

The NIHE undertakes research to estimate the 'housing needs' or future housing demand for NI (Paris *et al*, 2014). This is based on demographic projections, including changes in population, household composition and assumptions about output in the private sector. The latest estimates of need assume a net demand of just over 8,500 per year over the next 10 years. They project that private housing output will supply 7,210 dwellings per year over this period, leaving an estimated need for 1,300 new social dwellings per year to meet the necessary demand (For a discussion of how well housing estimates meets demand see CIH, 2010). These figures are not disaggregated to any sub-regional level. Since 2011 neither of the targets for private or social dwellings have been reached. Private dwelling completions have averaged between 4,500 and 5,500 per annum. Social dwellings completions reached a high of 1,378 in 2012 but have not come close to meeting the target in any subsequent year (Paris *et al*, 2014).

Changes in population are a key consideration when assessing housing need and these figures can be examined at the sub regional level. Chart 2.4 shows percentage population increases by local government districts over the last 10 years indicating that *Mid Ulster, Armagh, Banbridge and Craigavon*, and *Lisburn and Castlereagh* had the largest proportionate increases in population. For the latter two of these districts their growth in population has been matched by a growth in dwellings as evidenced in Chart 2.3. Similarly, *Derry and Strabane* which had the lowest increase in dwellings, also had the lowest increase in population. Population growth in Belfast was also amongst the lowest of any region, but still above that of *North Down and Ards, Causeway Coast and the Glens*, and *Mid and East Antrim*. *Mid Ulster* stands out as having the highest population increase at nearly 11%, but as Chart 2.3 showed it had only a modest increase in dwellings over the same period. The impact of this can be seen in Chart 2.1 which indicates *Mid Ulster* now has the lowest density of dwellings per population.

Chart 2.4: Percentage change in Population by District Council Northern Ireland, 2007-16



Source: Mid-Year Population Estimates, NISRA (2017)

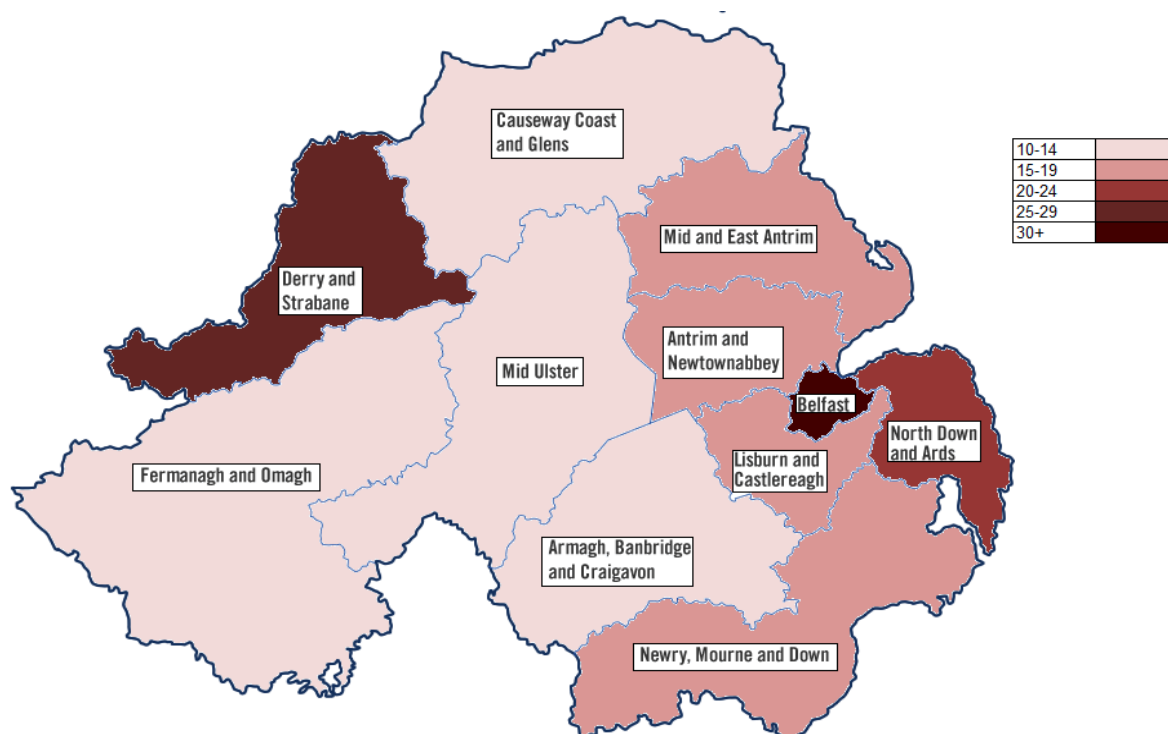
Chart 2.3 and 2.4 shows that while there are some sub regional imbalances, the overall supply of dwellings by region over the last 10 years broadly corresponds to changes in population. Population trends are obviously a key component in assessing future housing demand, but they are by no means a definitive measure of future housing need. Further demographic considerations are thus also used in order to judge what *type* of housing will be demanded in the future. The NIHE estimates take into account how issues such as the age profile and future welfare entitlements may impact on overall demand for social housing, but fundamentally, they do not disaggregate this to sub-regional level. As a result, it can be ascertained whether the overall number of dwellings matches population trends at sub-regional level, but it remains unclear how well matched the demand for specific types of housing is. In particular it would not be known whether social housing demand at sub-regional level is being met.

There is some indication of whether this need is being met from the NIHE housing applications data, which are available at sub-regional level. Chart 2.5 looks at demand in the social/public sector and shows social housing waiting lists for each local government district adjusted for population over the period 2007-2016. From this we see that *Belfast* has the highest reported figure with 32 cases on the social housing waiting list per 1,000 population, followed by *Derry*

and Strabane with 28. North Down and Ards had the next highest caseload with 22 per 1,000 population.

It is worth comparing these data to the data presented in Table 2.3 which shows that Belfast has the highest number of new social housing dwellings per 1,000 population. Despite this however it continues to have the highest social housing waiting lists per 1,000 population. Similarly, *Derry and Strabane*, and *North Down and Ards* have among the highest number of new social housing dwellings per 1,000 population, both districts continue to have amongst the highest social housing waiting lists at sub-regional level. Taken together this signifies a mismatch in the supply and demand of social housing, and particularly so for those regions with the greatest needs. Thus, whilst it was shown earlier that the delivery of the estimated demand for social housing has consistently been missed in each year since 2011, the above data would suggest that this is most problematic for those areas with the highest demand for such housing.

Chart 2.5: Social Housing Waiting list per 1000 Population by District Council Northern Ireland, 2007-16



Source: NIHE (2017)

In summary, looking at both supply and demand together there does not appear to be any identifiable misallocation of housing stock or new dwellings between the sub-regions of NI.

Changes in the housing stock, with some exceptions, tend to follow broad demographic trends, such as changes in population. However, this is not to say that the supply in each sub-region matches the demand. For NI overall the magnitude of supply clearly does not even match the demographic demand outlined earlier. It is the case that, of the limited supply there is in Northern Ireland, sub-regions with the greatest demand would appear to receive the largest shares of it.

Looking at different types of housing it would appear that those areas with the highest social housing waiting lists have experienced the largest per population increases in social housing. Once again however, while the majority of new social dwellings appear to be well matched to the regions with the highest waiting lists, the scale of new social dwellings is not of the same order as the demand for social housing, as expressed in waiting lists. The drivers of demand for social housing are clearly different to those driving demand for private housing. Demand for different types of housing is clearly a complex area that requires further attention in order to accurately assess how successful we are in ensuring that supply and demand are equally matched.

2.4 Housing Tenure

Statistics on housing tenure at UK level show that from the 1960s onwards, the relative size of the private rental sector is much the same as it was in 1961 but that it underwent significant change over that period. Research from the IFS (2015) and the Resolution Foundation (2017) at UK level showed that there was a large increase in mortgaged ownership and a fall in private rental up until the mid-1990s. From there mortgaged ownership gradually began to fall and was replaced by both outright ownership and private rental. At the same time the proportion of private rental was also being boosted by a gradual decline in the proportion of public rental. Statistics are available for NI over this period of time but limited sample size and discontinuity in the data series leads to significant volatility in the figures.

A breakdown of housing tenure figures for NI are available from census figures. There has been a number of significant changes in the balance of housing tenures within NI between 1981 and 2011, when the last census was completed. In particular, there was a strong decline in tenures rented from the NIHE, and substantial growth in both housing association and private rented tenures. Together these changes signalled an emerging trend of change in the housing system with growth in privatisation and owner-occupation and falling proportions of social housing.

Table 2.4 Housing Tenure Northern Ireland, 1981-2011 as per census figures (%)

	1981	1991	2001	2011
Owns outright	49.4	26	29.4	32.1
Owns with mortgage		36.3	40.2	35.4
Rented from NIHE	39.3	29.4	18.6	11.5
Rented from HA	1.0	2.6	2.6	3.4
Rented privately	9.1	5.8	6.7	13.5
Other, not stated etc.	1.2	1	2.5	4

Source: Census, NINIS.

Note: Outright ownership not separated out between own's outright and owns with mortgage in 1981.

Moreover, the structure of housing ownership and tenure has changed significantly in NI and substantially so over the last 10 years. Table 2.5 shows how tenure is comprised between owner occupiers and those who rent their home and the subdivisions within both those groups. Owner occupiers are split between those that own their own home outright and those who have a mortgage on the property. Within the rental sector, tenure is divided into those who rent from a private landlord, those who rent from the public sector, i.e. the NIHE and those who rent from the social sector which is made up of independent non-profit Housing Associations. The largest tenure type in NI is owner-outright at 37% followed by mortgaged homeowners at 29%. Taken together almost two thirds of dwellings in NI are owner occupied with the remaining third rented. 19% of all dwelling are rented privately and 14% are in the public/social rented sector.

Table 2.5: Housing Tenure Northern Ireland, 2015/16 (%)

Tenure Type	2015/16
Own outright	37.1
Own with mortgage	29.7
Rent private	19.2
Rent Public	10.8
Rent Social	3.2

Source: Family Resources Survey, NISRA (2017)

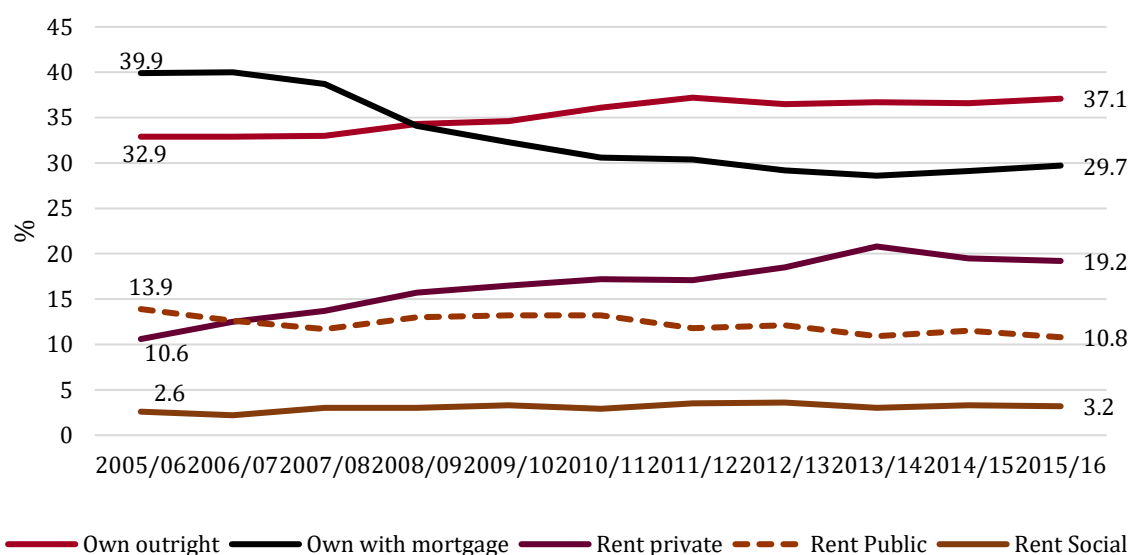
As Table 2.6 shows, in terms of tenure, it is clear that in many respects NI is more closely aligned with the ROI than it is with the regions of the UK. The levels of outright ownership and private rental are almost exactly matched between NI and the ROI. Mortgaged ownership levels in NI are most similar to those in England and bear a closer resemblance to Scotland and Wales than they do the ROI.

Table 2.6: Housing Tenure in UK by country and Republic of Ireland, 2015/16 (%)

	NI	ROI	England	Wales	Scotland
Own outright	37.1	37.8	33.1	40.4	32.9
Own with mortgage	29.7	33.1	29.6	25.8	27.7
Rent private	19.2	19.2	20.3	14.6	17
Rent Public	10.8	8.9	7.6	9.8	13.2
Rent Social	3.2	1	9.4	9.5	9.3

Source: Family Resources Survey, NISRA (2017) Housing in Ireland CSO (2017)

Among both those who own and rent their home, there has been a significant shift in the nature of ownership and renting, in NI, over the last 10 years. As Chart 2.6 shows the number of people who own their own home, either mortgaged or outright, has fallen from 72.8% in 2005/06 to 66.8% in 2015/16 and as a consequence the number of people renting has increased 27.1% to 33.2% over the same period. Whilst this is a significant shift, the changes within ownership and rental tenure categories have actually been more dramatic.

Chart 2.6: Housing Tenure Northern Ireland 2005/06-2015/16

Source: Family Resources Survey, NISRA (2017)

In 2005/06, just over 10% of people rented their homes from private landlords. By 2015/16, this proportion had almost doubled to 19.2%. The proportion of people renting from the public sector (NIHE) has fallen from 13.9% in 2005/06 to 10.8% in 2015/16. The proportion of people who now rent their home from the public sector is almost equal to the proportion of people who rented their home privately 10 years ago. Whilst the proportion of people who rent their homes from Housing Associations has increased, the significant increase in private rental tenures is likely to have also been affected by changes in the owner occupier sector. In 2005/06, people who

owned their own home with a mortgage were the largest group by housing tenure at nearly 40%. That proportion has fallen by over a quarter in the 10 years to 2015/16 while outright home ownership grew from 32.9% to 37% of all dwellings.

The trend at UK level from 1961 most likely reflects the scale of home building that was initiated by the Macmillan government and subsequent administrations in the 1960s (CIH, 2015). Thus, there is likely to be a significant generational impact with those who bought homes in the boom time of mortgages from the late 1960s to the mid-1990s coming into outright ownership over the last 25 years. The Right-to-Buy policy introduced by the UK government in 1980 is likely to have impacted on the drop in public rental over the years that followed. These are just two significant housing events which are likely to have influenced the tenure trends of the past 10 years. However, it is quite likely that within this overall compositional change, different age groups have impacted disproportionately by these events as per the findings of Cribb *et al*, 2018.

Table 2.7 presents housing tenure by age cohorts for 2005/06 and 2015/16 respectively. Looking first at public rental, the reduction in tenure has been almost uniform across the three age groups (18-32, 35-39, 50-64). The 65+ age cohort saw the largest fall in public rental and was the only group to also see a significant fall in social renting. However, almost all of the reduction in both public and social renting for the 65+ age cohort has been replaced with outright home ownership. The increase in social renting was largest for the 18-34, with more modest increases for the 34-49 and the 50-64 age groups.

Private rental has increased for all age cohorts but dramatically so for 34-49 age group where it has increased over the period from 6.8% of the total in 2005/06 to 19.9% in 2015/16. Among the 18-34 cohort where it has increased from 27.6% of the total in 2005/06 to 50.3% of the total in 2015/16. Mortgaged ownership has fallen most sharply for the 18-34 age cohort, dropping from nearly half of all tenures in 2005/06 (49.4%) to less than a third in 2015/16 (31.4%) but has increased for the two oldest age groups (See Table 2.7). Both forms of home ownership have fallen for all of the age cohorts under 65 and both have increased for the over 65s.

Table 2.7: Age Cohorts by Housing Tenure in Northern Ireland 2005/06 – 2015/16 (%)

Tenure type	Year	18-34	34-49	50-64	65+
Rented from NIHE	05/06	13.1	13.1	13.3	16.4
	15/06	10.4	10.1	11.4	11.2
Rented from HA	05/06	1.9	1.5	1.3	6.1
	15/06	4.7	2	2.7	3.9
Rented private	05/06	27.6	6.8	5.4	7
	15/06	50.2	19.9	7.8	6.6
Owned outright	05/06	7.8	15.2	43.6	68
	15/06	3.3	12.8	51.5	75.6
Owned with mortgage	05/06	49.6	63.5	36.4	2.6
	15/06	31.4	55.1	26.6	2.7

Source: Family Resources Survey, NISRA (2017)

Note: NIHE= Northern Ireland Housing Executive and HA= Housing Associations

The overall trend of falling public rental and mortgaged ownership leading to increased private rental and outright ownership has not impacted all age groups in the same way. Whilst there are exceptions, the majority of the increase in private rental is contained amongst the lower age cohorts, as is the fall in mortgaged ownership. While the fall in public rental has been more evenly spread across the age cohorts, this has resulted in increased outright ownership amongst older cohorts and increased private and to a lesser extent social rental in younger age cohorts.

The 10-years from 2005/06 to 2015/16 have seen a significant shift in the patterns of housing tenure in NI. It would be mistaken to assume this change has been natural or wanted however. For example, looking at Chart 2.6 it would be possible to deduce that the reduction in the proportion of households in public housing represents a reduction in demand for public housing. However, it is equally plausible to deduce that Right-to-Buy policies reduced the stock of public housing available and therefore prospective public housing tenants sought other tenures. Similarly, younger cohorts may have developed less of a preference for mortgaged ownership, but it is equally likely though that they can no longer afford to buy their own homes and thus seek out private rental (Shelter, 2012).

Indeed, the affordability of housing has become an issue of key concern for researchers and policy makers alike in recent years. Interest in the topic reached a peak recently with various reports showing evidence of a crisis in affordability in both the ROI (Healy and Goldrick-Kelly, 2017; Hearne, 2017) and in Great Britain (Joyce *et al*, 2017; Savills, 2017). Little attention however has been given to the affordability of housing in Northern Ireland, or to the impact of housing costs on living standards, and so it is to this that the next section turns.

3. HOUSING, LIVING STANDARDS & THE AFFORDABILITY OF HOUSING

The housing circumstances in which one lives constitute an important aspect of one's living standards, but they are also at once an important determinant of living standards. This is because safe and adequate housing is essential to meet basic human needs and a prerequisite to a sense of personal security, comfort, privacy and personal space (OECD, 2011). Housing is also crucial to satisfying other essential needs, such as having a family, or having access to basic amenities. Nevertheless, high or unaffordable housing costs can negatively impact on living standards.

The impact of housing costs on living standards lies in the balancing of housing costs with other non-housing expenditures, within the constraints of one's income (Stone, 2006). However, given that housing costs take-up a large share (and in many cases is the single biggest expenditure) of the household budget the cost of one's housing has the potential to affect a wide range of other outcomes. Research has shown that burdensome housing costs have led many households to reduce their expenditure on other necessities such as food, clothing, healthcare (Gabriel *et al*, 2005; OECD, 2011). Other studies show that housing costs result in some households experiencing 'housing-cost-induced-poverty' (Bramley, 2011; Stone *et al*, 2011; Tunstall *et al*, 2013).

Beyond the importance of housing costs for material living standards, the condition or quality of one's housing has also been found to be essential. For example, there is a substantial body of evidence showing that poor quality housing has a negative effect on long-term physical and mental well-being (Marmot, 2011; Payne, 1999). Poor quality housing has also been found to be a strong predictor of emotional and behavioural problems in children, as well as a child's school performance (Coley *et al*, 2017; Solari and Mare, 2012). Furthermore, the quality of one's housing has been found to be an important determinant of employability and likelihood of participation in basic social activities (OECD, 2011). Moreover, the Marmot Review (2011) concluded that poor quality housing exacerbates the plight of the poor, with evidence that the effects of poverty on living standards are intensified by poor quality housing.

3.1 The impact of housing costs upon living standards

Whilst several different approaches exist, the most commonly used and widely recognised measure to indicate whether or not housing costs are having a disproportionate impact on living

standards, is the 'housing cost to net household income ratio' (Resolution Foundation, 2016) and is the first approach we utilise here to assess the impact of housing costs on living standards.

Using this measure the point at which housing costs become unaffordable or have a disproportionate impact on living standards is based on a normative judgement about what proportion of income should be spent on housing. Over time, thresholds of the housing cost to income ratio have varied between 25% and 40%, with households exceeding these cost burdens identified as having an affordability problem (Chen *et al* 2010; Jones *et al*, 2010; Resolution Foundation, 2016). In the Republic of Ireland, the Housing Agency set a threshold of 35% to assess housing affordability (Housing Agency, 2015), the United Kingdom tends to vary between thresholds of 25% and 30% (Bramley, 2011), whilst Eurostat sets the threshold at 40% (Eurostat, 2014).

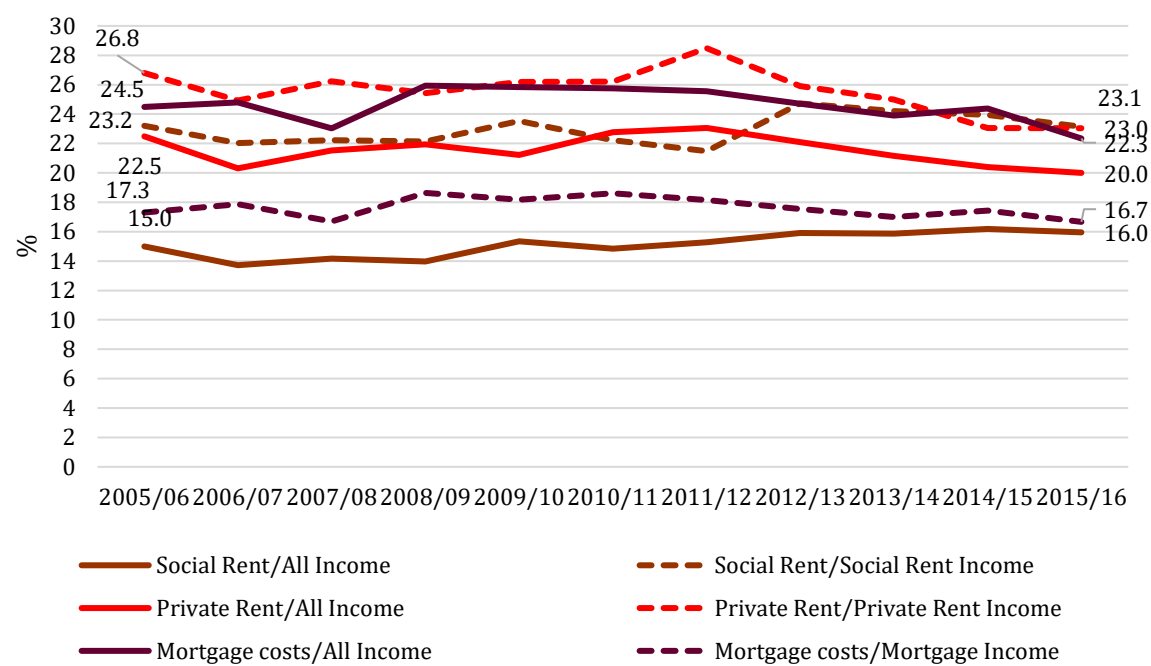
As mentioned earlier, in the following analysis public (NIHE) rental tenants and social (Housing Association) rental tenants are grouped together as 'Social Housing'. This is because sample size becomes an issue for the latter when incomes and housing costs are considered. Furthermore, while accounting for the housing costs of those in the rental sector is standard enough, assessing the housing costs of owner occupiers is more contested. Many argue that for mortgaged owners, only the interest portion of a mortgage repayment should be counted toward housing costs (Institute for Fiscal Studies, 2015; Stone, 2006; Tunstall *et al*, 2013). It is argued that the capital repayment represents an accumulation of wealth because at the end of a mortgage term, these households will realise an asset. While this is technically correct, it is not entirely intuitive.

Firstly, the assumption that the mortgaged owner will eventually realise an asset is reasonable, but not definitive. Whether or not an asset is realised depends on many things, not least the price at which the home was purchased, the term of the mortgage and whether the home is ultimately repossessed. While the wealth impacts of housing tenure are very different for renters and owner occupiers, the income effects are much the same. A mortgaged owner faces a substantial capital and interest repayment every month in order to maintain their home. Whether or not the mortgaged owner will end up owning the asset or not is of little interest if the cost of their mortgage becomes too large in comparison to their income. Outright owner occupiers can face limited housing costs usually associated with issues such as ground rent or communal service charges. However, these costs are infrequent and of insignificant magnitude when they do occur

for households. For this reason, in looking at affordability we have chosen to exclude outright owners and to present capital and interest repayments within mortgaged owners cost.

Chart 2.6 shows housing costs as a percentage of net household income for those with a mortgage, those in the social rented sector, and those in the private rented sector. For each of the three tenure types it presents housing costs as a percentage of median net household income within that tenure type, as well as a percentage of the median net household income of all households. What is most striking about this chart is that even in taking the lower end of the housing cost to net household income ratio thresholds which tends to be 25%, there do not appear to be any housing affordability problems in the latest year for which data is available, with housing costs not exceeding beyond 25% on average for any of the ratios considered below.

Chart 3.1: Housing Rental Cost as Percentage of Household Income Northern Ireland 2005/06 - 2015/16



Source: Family Resources Survey, NISRA (2017)

We see that while mortgage housing costs are the highest as a percentage of overall net income, when expressed as a percentage of the median net household income of actual mortgage holders, it is the lowest cost tenure. This means that while mortgaged ownership might be affordable for

those that presently have a mortgage, it is the least affordable housing tenure for the population at large. When measured as a percentage of all net household income, the social rented sector has the lowest housing cost, but when measured against the income of households actually within the social rented sector, it has the highest housing costs. In fact, housing costs as a percentage of net household income are now equal between the social rented sector and the private rented sector.

When measured against the other regions of the UK housing costs in NI compare quite favourably. On all measures for those in rental tenures NI is the most affordable UK region. Scotland has similar profile of affordability to that of NI in terms of social renting. This may be due to the fact that within 'social housing', as shown in Table 2.6, Scotland has a similar ratio of Housing Association tenancies to that of NI, lower than Wales or England. Housing Association rents tend to be higher on average than those of local authorities or the NIHE in NI's case. In terms of mortgage costs, NI mortgage repayments as a percentage of a mortgage owner's income are still comparatively low, but slightly above that of Wales. Interestingly, mortgage costs as a percentage of all income are significantly lower in showing mortgaged ownership to be more affordable to the population at large than it is in any other region of the UK.

Table 3.1: Housing Costs as a percentage of household income by Tenure and UK Region, 2015/16

	NI	England	Wales	Scotland
Social rent housing costs/All household income	16.0	20.7	22.1	16.3
Social rent housing costs/Social Rent household income	23.1	30.2	27.7	23.5
Private rent housing costs/All household income	20.0	30.1	26.0	25.1
Private rent housing costs/Private rent household income	23.0	31.7	30.7	27.2
Mortgage housing costs/Mortgage household income	16.7	19.0	15.8	16.3
Mortgage housing costs/All household income	22.3	27.9	25.7	25.3

Source: Family Resources Survey, NISRA (2017)

Indeed, in utilising any one of the widely used housing cost to income ratio thresholds it does not appear, on the whole, that housing costs are having a particularly problematic effect on living standards in NI. We know however that average measures can conceal important differences between different sub-groups of the population. Thus, whilst housing costs may be relatively affordable for much of the population, there may be some segments of the population whose housing costs are impacting significantly on their living standards and so it is appropriate to assess if this is the case.

Thus, in order to get a clearer sense of the burden of housing costs for different segments of the population we break down households into those who spend less than 25%, more than 25%, and

40% or more of their net household income on housing costs. In doing so we see that when we look across all tenures, the majority of households do not have housing costs which exceed either spectrum of the thresholds that might suggest that housing costs are having a negative effect on living standards (Chen *et al*, 2010). Specifically, over two-thirds (67.9%) spend less than 25% of their household income on housing costs, whilst just over nine out of ten households (90.5%) spend less than 40% of their net household income.

Nevertheless, there is also evidence that for a small, but not insignificant share of households, housing costs command a large proportion of household income. One in ten households (9.5%) are spending more than 40% of their net household income on housing costs. Importantly however, Table 3.2 below shows that this is substantively influenced by tenure with those in the private rented sector being the most likely to spend more than 40% of their net household income on housing costs, with close to 1 in 6 of those from the private rented sector doing so. This contrasts with just over 1 in 10 (10.5%) of those in the social rented sector and 1 in 20 (5.4%) of those who have a mortgage.

Table 3.2: Percentage of household income spent on housing costs***

	All tenures*	Social rent	Private rent	Mortgage
< 25%	67.9	57.7	61.3	79.2
> 25%	32.1	42.3	38.7	20.8
40% >	9.5	10.5	13.8	5.4

Source: Family Resources Survey, NISRA (2017)

Note: * those who own outright are excluded from the analysis.

*** Relationship statistically significant at the $p < 0.001$ level.

Nevertheless, despite its widespread use, the housing cost to income ratio approach to capturing the impact of housing costs on living standards has been criticised with several inherent deficiencies. Critics maintain that with the housing cost to income ratio measure there is a lack of recognition that affordability is not just a simple problem of ‘too-high housing costs’ but is about the relationship between the cost of housing and income. In this way, households with very high housing costs might still manage to maintain high living standards because they still have plenty of remaining income. In this case, the high cost to income ratio might simply indicate a preference for large or luxurious housing and so it is difficult to sustain the argument that housing costs are impacting negatively upon living standards. In contrast, households with relatively low incomes might spend a low proportion of their income on housing, and still be left with little to afford other basic non-housing necessities. In responding to these criticisms, a number of scholars recommend

looking at how housing costs differ for those with different incomes. This allows us to better assess the differential impact of housing costs for living standards, for those with different incomes.

3.2 Do housing costs vary with income?

We begin by looking at how housing costs vary within and across tenures for those at different points of the income distribution. We then turn to look the income distribution and to the inequalities in income which exist within and across tenure types. Doing this allows us not only to examine the differential housing costs burdens within tenures faced by people with different incomes, but also allows us to examine the differential housing cost burdens for those with different incomes in different tenure types. The income distribution is broken down into income quintiles i.e. five equally sized groups. The first quintile group contains the poorest 20% of the population, the second quintile group contains the next poorest 20%, and so on. The concept of income is based on net equivalised household income.

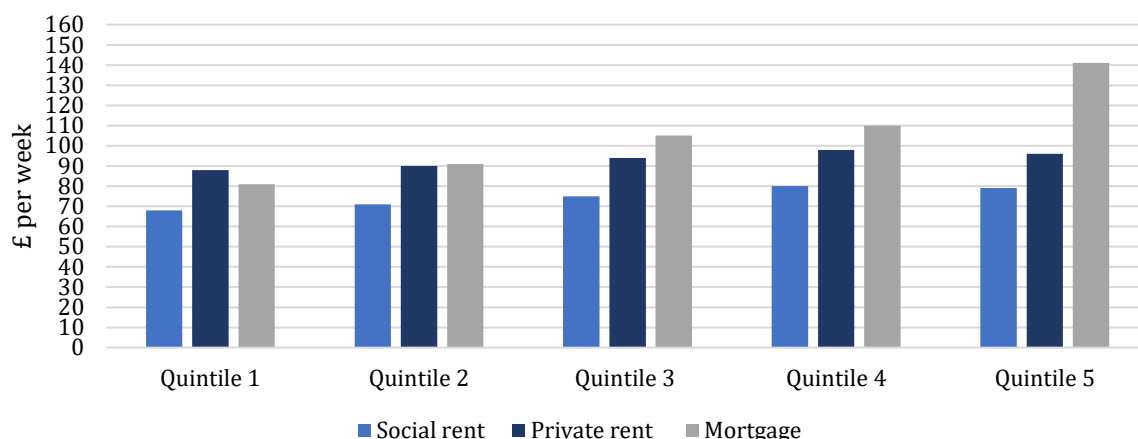
Chart 3.2 shows how housing costs vary across the income distribution and within each tenure it can be seen that housing costs tend to be higher for those further up the income distribution. In the social rented sector there is an upward gradient in housing costs across each incremental income quintile until we reach the fourth income quintile, beyond which median housing costs do not rise. For this sector, housing costs vary from an average of £68 per week for those in the lowest income quintile to an average of £79 per week for those in the top income quintile.

Housing costs also increase incrementally across each income quintile for those in the private rented sector, with the exception of the top income quintile where housing costs are slightly lower than they are in the fourth income quintile. Housing costs for those in the bottom quintile are £88 per week on average, compared to £96 per week for those in the top quintile. In the bottom quintile, housing costs are statistically significantly higher for those in the private rented sector than they are for those in the other tenures.

For those with a mortgage, whilst housing costs are lower in the bottom quintile than they are for those in the private rented sector the gap closes in the second income quintile. Moving incrementally up the income quintiles past this however we see an increasing gap in housing costs between those with a mortgage and those in social or private rented housing tenures. Mortgage holders have the highest median housing costs for those with incomes in the top three income quintiles. Furthermore, it is worth noting that the variance in housing costs for those with

different incomes is highest for those with a mortgage, varying from £81 per week on average for those in the bottom income quintile to £141 per week for those in the top income quintile.

Chart 3.2: Housing costs across the income distribution, by tenure, 2015-16 ***



Source: Family Resources Survey, NISRA (2017)

Note: *** = Relationship statistically significant at the $p < 0.001$ level.

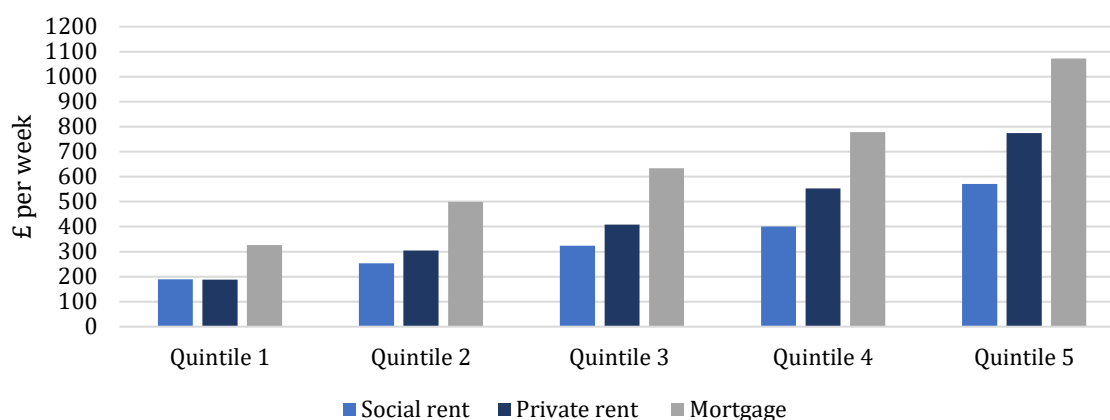
Next, we turn to examine the inequalities in income. From Chart 3.3 we see that there are substantial inequalities in income within each of the tenure types, albeit the gap between the poorest and the richest is highest in the private sector where those in the lowest income quintile have an income which is over four times lower than what it is in the top income quintile. By comparison the ratio of incomes between the rich and poor in both the social rented and mortgage sector is 3:1.

Interestingly, the median net household income of those in the lowest income quintile is almost the same for those in the social rented (£189) and private rented sector (£188). At £326 the median net household income in the lowest income quintile is substantially higher for those with a mortgage.

Beyond the lowest income quintile, a gap begins to emerge between those in the social rented and private rented sector, with the gap getting consistently wider higher up the income distribution. For example, in the second income quintile those in the private rented sector have an income which is £52 per week higher than those in the social rented sector. This gap widens to £203 in the top income quintile. Still though, as is clear from *Chart 3.2* the income of those with a mortgage

remains significantly higher than both those in the social and the private rented sectors across each income quintile.

Chart 3.3: Net household income across the income distribution, by tenure, 2015-16 ***



Source: Family Resources Survey, NISRA (2017)

Note: *** = Relationship statistically significant at the $p < 0.001$ level.

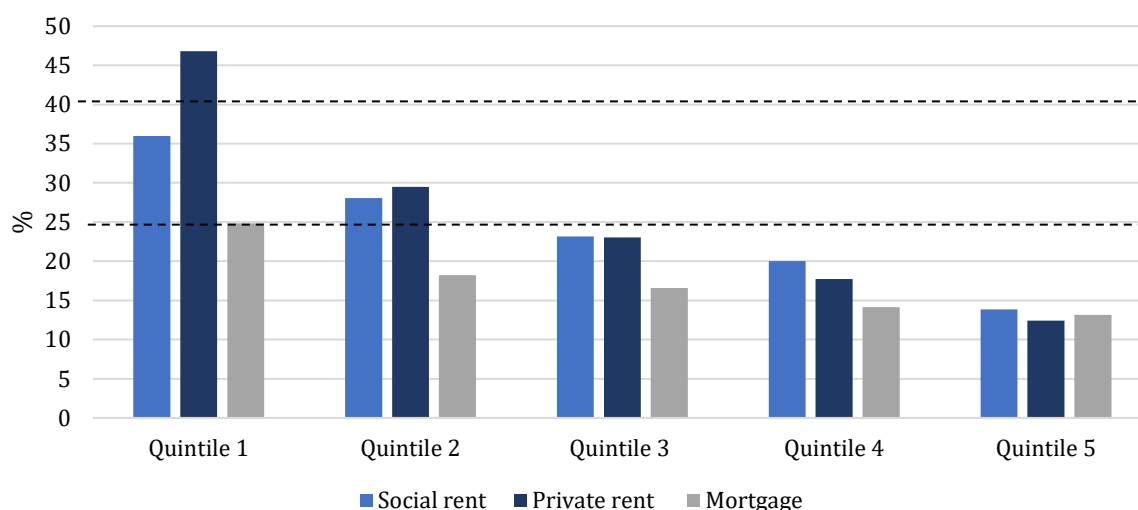
In summary, taking together the results from Chart 3.2 and Chart 3.3, it is worth drawing attention to a number of noteworthy results which illustrate the differing interaction between housing costs and income across tenure types. For instance, whilst incomes are generally lower across income quintiles in the social rented sector, so too are housing costs. The only notable exception of this is in the bottom income quintile where the median household income in the social rented sector is the same as that of the private rented sector. There was however marked differences in the bottom quintile in the housing costs between those in the private rented and those in the social rented sector, with housing costs lower in the latter. The implication of this is that despite both tenures having almost exactly the same median net household income, housing costs have a larger impact on the income of private renters in the bottom income quintile, than they do in the social rented sector.

There is another example of the different interaction between income and housing costs when we focus specifically on those with a mortgage and those in the private rented sector with an income in the second income quintile. Here we see that at £499 the median household income of those in the second income quintile is £190 lower than the median household income of private renters in the same position (£309). In Chart 3.2 however we see that the housing costs of those with a mortgage and those in the private rented sector is approximately the same. Thus, despite having broadly the same housing costs, housing costs have a larger impact on the net household income

of those in the second income quintile in the private rented sector, because their median household income is lower.

As has been shown, both incomes and housing costs vary substantially for those at different points of the income distribution within and across tenures. Therefore it is worth examining if there are particular income groups or tenures who face housing affordability problems as per the thresholds used previously. Chart 3.4 thus presents the percentage of income spent on housing across income quintiles in each tenure. Irrespective of which percentage is used, only households in the private and social rented sector exceed either affordability threshold, and only those in the lowest two income quintiles. Only households in the lowest quintile of the private rental sector reach the 40% threshold. In the mortgage sector the housing cost burden never surpasses the lowest utilised threshold, even for those in the lowest income quintile.

Chart 3.4: Percentage household income spent on housing costs across the income distribution by tenure, 2015-16 ***



Source: Family Resources Survey, NISRA (2017)

Note: *** = Relationship statistically significant at the $p < 0.001$ level.]

Evidence from Chart 3.4 above speaks to the criticism that has been made of the housing cost to income ratio approach in terms of the role of personal choice or preference, and the choices which some households make to obtain large quantity or high-quality housing, or to save on other costs such as transport (Wilson and Hogarth, 1998). It can be seen however that the flexibility to make such a trade-off is strongly correlated with economic and social circumstances with those at the lower end of the income distribution spending a higher proportion of their income on housing

costs. Moreover, as one moves up the income distribution from low to high income the housing cost to income ratio falls for those in each tenure. Thus, across each of the housing tenures, housing costs exert an increasingly higher burden on lower income households.

This evidence supports the proposition made by Stone (2006) that while higher income households may exercise considerable discretion about how to allocate their resources between housing expenditures and non-housing expenditures, there are limits that can be made in the quest to lower the housing cost to income burden for those on lower incomes. In addition, given that housing costs generally make the first and most substantial claim on household income many lower income households have little discretion in determining what they have left for non-housing consumption.

Moreover, the evidence makes the point that whilst on average housing costs fall below widely used affordability thresholds this is not the case for those with the lowest incomes in the rented sectors, and particularly those in the private rented sector. It is reasonable to conclude then that those with the lowest incomes in both the private and social rented sectors face a much larger cost burden in terms of the proportion of net household income spent on housing costs. This is likely to have far-reaching consequences for income available for non-housing related expenditures.

Still, however, many researchers point out that regardless of where any precise housing cost to income ratio standard is set the living standards effects of housing costs are difficult to capture (Kutty, 2010; Stone, 2006). In this way, the housing cost to income ratio measure does not consider whether the income available after housing costs is adequate to meet non-housing costs.

3.2 Do housing costs create poverty?

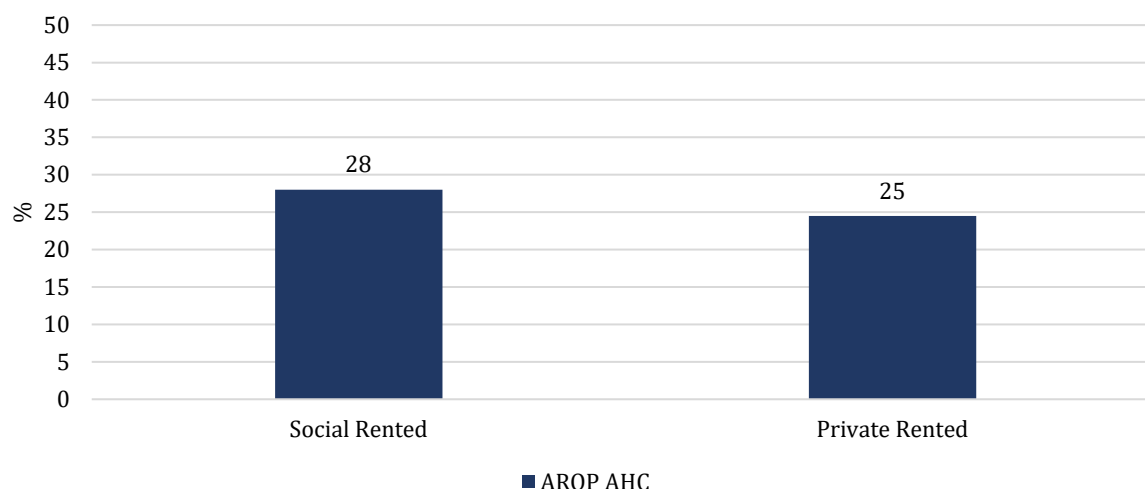
Stone (2006) among others thus advocate that in assessing the impact of housing costs on living standards that we need to utilise a 'residual income measure'. The residual income approach defines housing as affordable if a household is able to afford to meet their other essential needs after paying for the cost of housing. The residual income measure assesses whether housing costs make such an onerous claim on household income, that after housing costs income falls below that which is required to support a socially acceptable standard of living and is at-risk-of-poverty (Bramley, 1994; Yang and Chen, 2014). The most commonly utilised income threshold used to identify if a household is at-risk-of-poverty is 60% of equivalised median household income, and so this is the threshold used in this paper.

Given the low proportions of those with a mortgage who spend 40% or more of their income on housing costs, as well as the fact that even those with the lowest incomes do not surpass the lower housing cost to income affordability threshold they are excluded from the at-risk-of-poverty analysis that follows.

It is worth noting however that, unlike the norm for publications of at-risk-of-poverty after housing costs data, which when calculating the housing costs of those with a mortgage tends to only include the interest payment, and not the principle repayment, this paper includes both the principle payment and the interest payment. This has the effect of altering the at-risk-of-poverty after housing costs downwards from that published in official published statistics (Department for Communities, 2017). This is principally because overall median household income after housing costs is lowered by virtue of the fact that housing costs are higher for those with a mortgage, and so a lower proportion of households fall below this level. So, while mortgaged households are excluded from the poverty analysis, the income of these households still influences the at-risk-of-poverty after housing costs measure.

Yet, still, as is clear from Chart 3.5 substantial proportions of those in both the social and private rented sectors are at-risk-of-poverty after housing costs, with 28% of those in the social rented sector and 25% of those in the private rented sector at-risk-of-poverty after housing costs. It is worth pointing out however that the absolute number of households at-risk-of-poverty after housing costs in the private rented sector is higher than it is in the social rented sector, by implication of the fact that the private rented sector makes up a larger share of the housing market. Thus, whilst there are just over 29,000 households at-risk-of-poverty after housing costs in the social rented sector, there are close to 34,000 households in the private rented sector.

Chart 3.5: Percentage of households at-risk-of-poverty after housing costs by tenure, 2015-16 ***



Source: Family Resources Survey, NISRA (2017)

Note: *** = Relationship statistically significant at the $p < 0.001$ level.

Moreover, we need to be careful to not conclude from the above data that it is the *housing costs* that are creating a higher level of after housing costs poverty in the social rented sector, than the private rented sector and to remember that both *household income* and *housing costs* are key in determining a household's likelihood of being at-risk-of-poverty-after housing costs.

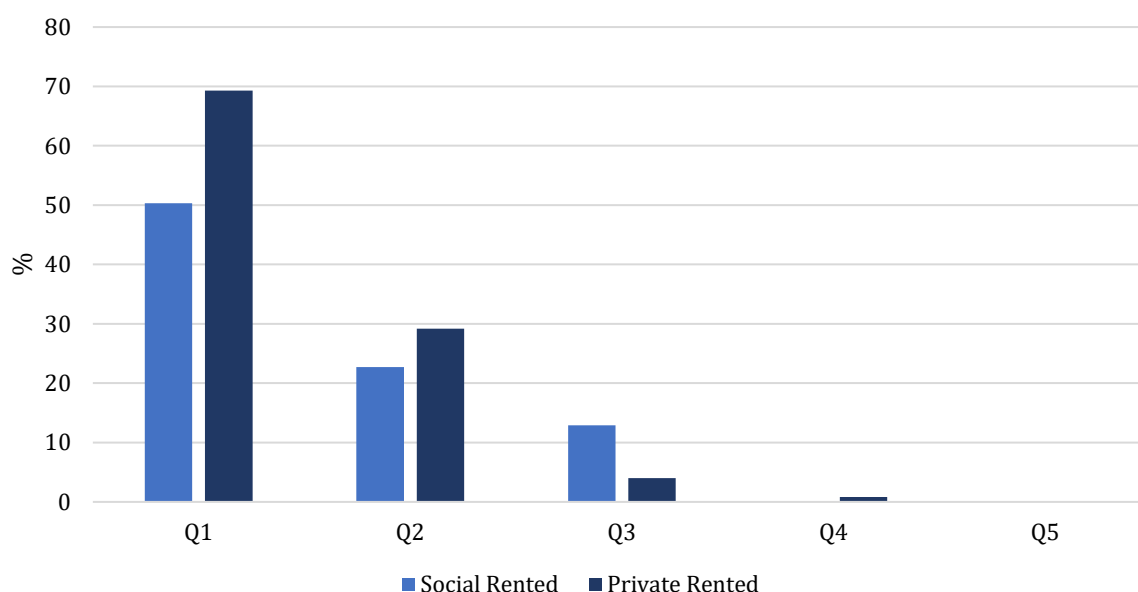
In this sense, as shown in Chart 3.2, at all points of the income distribution those in the social rented sector have a lower income, compared with those in the private rented sector, with the exception of the lowest income quintile where household incomes between the social and private rented sectors are approximately the same. By consequence of their lower average household income then it is perhaps unsurprising that those in the social rented sector have a higher overall risk-of-poverty after housing costs.

Furthermore, whilst poverty risk might be higher in the social rented sector overall, it might be that there are particular groups within the private rented sector who face a particular risk of poverty. Therefore, it is more informative to look across the income distribution to assess the poverty risk for those in different income quintiles in both tenure types. Moreover, by looking at-risk-of-poverty after housing costs across the income distribution we will be better positioned to understand the role of both household income and housing costs *per se* in determining the likelihood of being in poverty.

In doing so we see that almost all of those at-risk-of-poverty after housing costs in both tenures are concentrated in the lower income quintiles. Poverty risk after housing costs is particularly

acute in the lowest income quintile, and particularly so for those in the private rented sector with 69% at-risk-of-poverty after housing costs, compared to 50% of those in the social rented sector (Chart 3.6 below). Similarly, for those in the second lowest income quintile poverty risk is also higher for those in the private rented sector (29%) than it is for those in the social rented sector (23%). In the third income quintile, poverty risk after housing costs is significantly higher amongst those in the social rented sector (13%) than it is for those in the private rented sector (4%). In the fourth income quintile a very small proportion in the private rented sector (1%) are at-risk-of-poverty after housing costs. No one in the highest income quintile is at-risk-of-poverty after housing costs.

Chart 3.6: Risk of being in poverty after housing costs for those in different income quintiles, by tenure, 2015-16 ***



Source: Family Resources Survey, NISRA (2017)

Note: *** = Relationship statistically significant at the $p < 0.001$ level.

In seeking to interpret this evidence, income position clearly is an important determinant of poverty risk after housing costs in both the social and the private rented sectors. However, as already discussed, we know that the likelihood of being at-risk-of-poverty-after housing costs is a corollary of both household income and housing costs. Thus, in seeking to try and separate out the role of both household income and housing costs in determining the risk of poverty after housing costs we need link the above findings to the relationships found between household income and housing costs in Chart 3.2 and Chart 3.3, as discussed previously.

Specifically, looking first to the role of both household income and housing costs in determining at-risk-of-poverty after housing costs it was shown that for those in the lowest income quintile median household income was approximately the same in both the social and private rented sectors. It was also shown however that housing costs were significantly higher for those in the private rented sector. We can conclude from this the greater importance of housing costs in determining risk of poverty after housing costs in the private rented sector, than the social rented sector. This has the effect of putting this group at much higher likelihood of poverty after housing costs, than those with the same income in the social rented sector.

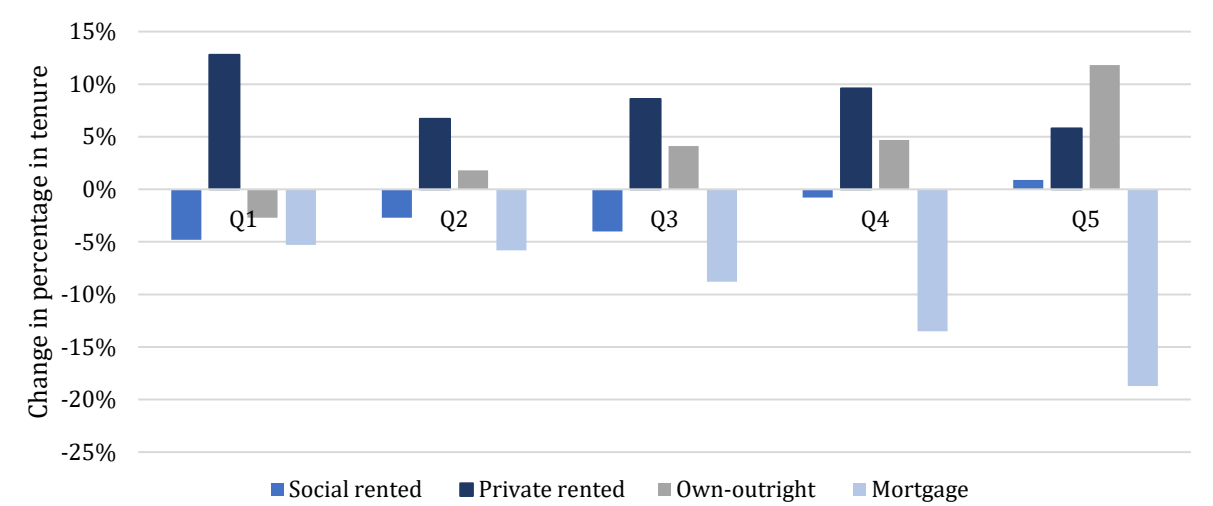
Similarly, in the second income quintile we see that whilst median income is higher in the private rented sector than it is in the social rented sector, housing costs are significantly higher. Specifically, in the second income quintile household income is 18% higher in the private rented sector than it is in the social rented sector. Nevertheless, for the same group housing costs are 22% higher in the private rented sector than the social rented sector. Again, as can be seen in Chart 3.6 above this has the effect of pushing a higher proportion of private renters than social renters into poverty.

In the third income quintile those in the social rented sector face a higher risk of poverty after housing costs. Given however that housing costs do not exert an exceptionally large burden on income, and housing costs are significantly lower than in the private rented sector, it is reasonable to conclude that the reason for the higher poverty rate in the third income quintile is a result of the significantly lower income.

Taking together the evidence would lead us to the suggestion that risk of poverty after housing costs in the social rented sector is being driven by the lower incomes of those in this sector, whilst poverty after housing costs in the private rented sector is being driven more by the higher housing costs which those with the lowest incomes in this sector face. In this case, by implication of the fact that despite having the same median household income those with the lowest incomes in the social rented sector have a significantly lower risk of poverty after housing costs than those in the private rented sector, suggests that in many ways the social rented sector is successful at breaking the link between poverty and housing circumstance. This, the data suggests, is the outcome of the lower housing costs in the social rented sector. In contrast, for those with low income significantly higher housing costs in the private rented sector appear to be exacerbating the risk of poverty. This has important implications for policy, particularly in the context of the 'residualisation' of the social rented sector, and the growth of the private rented sector for those with low incomes (See

Chart 3.7 below). Moreover, it calls to question the narrative put forward by some that the private sector is able to meet the needs of low-income households and provide affordable housing (See Chartered Institute of Housing, 2012),

Chart 3.7: Change in percentage of those in different tenure types across income quintiles between 2005/06 and 2015/6



Source: Family Resources Survey, NISRA (2017)

3.3 Characteristics of those at-risk-of-poverty after housing costs

Next, we turn to look at the characteristics of those who are at-risk-of-poverty after housing costs in each tenure type. This is important because it allows us to further understand the composition of those at-risk-of-poverty after housing costs in each tenure. It also allows us to compare and contrast the composition of the poor in the social rented and private rented sectors where we see stark differences in the socio-economic and socio-demographic characteristics of the poor in both tenures.

In the social rented sector three out of four of households at-risk-of-poverty after housing costs are workless households (74%). A further 19% are in households where at least one adult works, whilst only a small proportion of the households at-risk-of-poverty after housing costs in the social rented sector are those where all adults are in employment.

These results are in contrast to what we see in the private rented sector where less than half of households at-risk-of-poverty after housing costs are households in which no one works (45.7%).

In the private rented sector, the majority of households at-risk-of-poverty after housing costs are ones in which some or all adults are in employment. Specifically, over one in five of households at-risk-of-poverty after housing costs are households in which all adults work (22%), whilst 32% are in households in which at least one adult works.

There are also important differences in the household compositions of those at-risk-of-poverty after housing costs in the social rented and private rented sectors, albeit in both sectors single households make up the largest share of those at-risk-of-poverty after housing costs. Single adult households comprise 37% of the total in the social rented, and 45% in the private rented sector. Together lone parent and households with children comprise around 45% of the total in the social rented sector, and 37% in the private rented sector. Importantly, couples without children comprise a substantially larger share of those at-risk-of-poverty after housing costs in the private rented sector (14%, compared to 9% in the social rented sector).

Table 3.3: Characteristics of those at-risk-of-poverty after housing costs

	Social rented	Private rented
Economic status		
All adults in employment	7.1	22.2
At least 1 adult in work	19	32.2
No adult of working age in employment	73.9	45.7
Household composition		
Pensioner couple	1.1	1.4
Pensioner single	8.1	3.5
Couple with children	15.8	16.9
Couple without children	7.9	13.6
Lone parent	29.8	19.8
Single	37.3	44.8
Age category		
16-34	25.6	58
35-49	35.6	19.1
50-64	29.6	17.1
65 +	9.2	4.9
Gender		
Male	41.7	51.3
Female	58.3	48.7
Health		
Good	48.1	60.2
Fair/Bad	51.9	39.8

Source: Family Resources Survey, NISRA (2017)

When we look at the breakdown by age in Table 3.3 we see that in the social rented sector those at-risk-of-poverty after housing costs are spread across the age categories, albeit only a small

percentage are aged 65 and over (9.2%). In the private rented sector, the majority of those at-risk-of-poverty after housing costs are aged between 18-34 (58%). A further 19% are aged between 35-49, 17% are aged 50-64, and 5% are aged 65 and above.

In the social rented sector, the majority of those at-risk-of-poverty after housing costs are female (58%), whilst in the private rented sector the majority are male (51%).

Closely equal proportions of those with good (48%) or fair/bad (52%) health comprise those at-risk-of-poverty after housing costs in the social rented sector. In contrast, those with good health comprise the majority of those at-risk-of-poverty after housing costs in the private rented sector (60%).

What is clear from Table 3.3 above is that the socio-economic and socio-demographic composition of those at-risk-of-poverty after housing costs in the private rented sector differs markedly when compared to those in the social rented sector. Higher proportions of those at-risk-of-poverty after housing costs in the private rented sector come from working households, single or couple households, households with good health, male headed and households headed by young adults. As such, the typical interventions used to decrease risk of poverty such as getting more people into work, or providing further supports to families with children or households in poor health are not going to reduce risk of poverty after housing costs amongst this group. Thus, while poverty after housing costs in the social rented sector is compounded by other socio-economic and socio-demographic factors, the evidence suggests that this is not the case in the private rented sector. This again reinforces the point made previously that it is high housing costs amongst at-risk-of-poverty households in the private rented sector that is key, and points to the key role which housing policy can play to improve the situation of these households.

4. POLICY IMPLICATIONS

Section 2 mapped out housing supply and demand across NI finding only limited regional imbalance across local government districts. However, the sufficiency of particular types of housing was harder to judge and required a more in-depth analysis of housing tenure. That analysis showed significant change in tenures over the last 10 years, particularly among different age groups. Housing affordability across NI is relatively benign, particularly when compared with other regions of the UK. However, whilst overall affordability may look favourable, at the margins,

housing costs can adversely impact on the living standards of a small, albeit significant, number of households. While the number of households affected might be small, the impact on living standards can be significant, forcing many below the poverty line.

The demand for social for public housing has always outstripped supply. Not all applications are accepted and importantly not all applicants are homeless when they apply. This means that many people who apply for social or public housing may at that time be in another form of housing tenure. Section 3 examined those spending above 25% and 40% of their income on housing costs. While some mortgaged owners reached this limit, the vast majority were contained in either the private or social rented sector. In particular those in the two bottom income quintiles in the private rental sector spent the most income on housing costs.

From the analysis in Section 3 we can conclude that low income is of key importance in determining the likelihood of being at-risk-of-poverty after housing costs. However, on both the housing cost to income ratio measure and the residual income measure, we have shown that for those on low incomes in the private rental sector, it is housing costs *per se* that are key in influencing the negative impact on living standards.

Given that, on the whole, housing costs in the private rented sector do not exert a particularly negative effect on living standards, it would appear that it is not rent levels in this sector which require policy intervention. Rather it seems that there is a minority, but significant share of households who live in the private rented sector, who would perhaps be better placed in the social rented sector. In this sense, as we have seen, the household income of those with low incomes in the private rented sector equates almost exactly with the household incomes of those in the social rented sector. The housing costs however are significantly higher. This is having a particularly negative living standard effect for this group.

It is possible that these are households who would have traditionally expected to find tenure in the social rented sector. Given the long-term trends of limited and decreasing supply in the social rented sector, it is possible that these are the households that have been left out. The different characteristics of those at-risk-of-poverty after housing costs in both the social and private rented sectors tends to support this contention and points to an important policy concern.

One of the key aims of the social housing system is to protect the poor and most vulnerable. Looking at the characteristics of those in the social rented sector it is composed of the types of households which are at the greatest risk of poverty such as lone parents, families with children,

workless households, and households in poor health. This would confirm that the social rented sector is in many ways successful in weakening the link between poverty and housing costs for some of the most vulnerable households. However, as the social rented sector has reduced in recent decades it has become much more difficult to house those who are 'just' poor.

It is worthwhile defining exactly what is meant by households who are 'just' poor. Those who are poor in the private rented sector may have the same resources available as those in the social rented sector but more of them work, are young, are in single or couple households and in good health. They are just as poor as those in the social rented sector, but they lack any classifiable characteristics to explain their situation. As supply in the social rented sector contracts, eligibility necessarily narrows. This group therefore have a much lower likelihood of being housed in the social rented sector, as those with greater or more complex needs are prioritised.

4.1 Options for Policy Intervention

For NI therefore, the problem appears to be that due to a lack of social or public housing, a small but significant number of households exist in poverty within the private sector. Our analysis shows that while the causes of poverty are many and diffuse, housing tenure is the significant factor for this group. Were these households accommodated in public or social housing, they would be significantly less likely to be in poverty.

The implication of this finding is that a lack of supply of social or public housing is forcing people into housing tenures that bring them into poverty. There are two options, from a policy point of view, which could ameliorate this situation. The first would be to improve the position of these households from within the private rental sector and the second would be to provide increased supply in the social or public sector.

To deal with the first policy proposal, it has been argued that reform of the private rental market in terms of both affordability and reliability could facilitate more vulnerable tenants within the sector and would be a positive development for affordability issues more generally (CIH, 2012). It has also argued that with on-going constraints on public finances and a lack of scale in Housing Associations limits the ability of either public or social housing to deal with tenants who would previously have received placement in social housing. Most of the solutions proposed look at the idea of providing greater certainty for such tenants in the private sector by providing longer and guaranteed leases. Greater certainty for private tenants would be a welcome policy move irrespective of current affordability problems. There are also proposals for more regulation of

rent increases and controls or caps in some circumstances. As evidenced in Section 3, overall, the private rental sector in NI is quite affordable in comparison to its regional equivalents and therefore efforts to further reduce rents overall in that sector could be wasteful and distortionary.

It has also been argued that a programme of supports to help the most vulnerable tenants such as the elderly and the disabled could alleviate individualised affordability problems within the private rental sector (Ellison *et al*, 2012). Such targeted support programmes could be of benefit to some private rental tenants at the margins of affordability. However, as the preceding analysis shows, there is no one consistent theme which explains ‘after housing costs’ poverty in the private rental sector. Therefore, attempts to alleviate ‘after housing costs’ poverty through a new social transfer to particular types of households could also be wasteful and possibly distortionary.

4.2 A Public Housing Solution

All of the proposals to deal with at-risk-of-poverty tenants from within the private sector are premised on the assumption that there will be no significant increase in the supply of social or public housing in the near future. While this is an understandable expectation given the present political disposition of the current UK government toward the national debt, it necessarily means that programmes aimed at helping households within the private sector are a second-best solution. Increased supply of social or public housing still remains the optimal policy goal. For these reasons a policy of new build social housing in NI to alleviate these affordability issues needs to be considered.

Building new social housing also has a significant financial benefit for the Northern Ireland Executive. Smyth (2017) highlights an example from English social housing showing that under a lifetime evaluation of costs, it is significantly cheaper for local council to provide new dwellings than it is to house existing Housing Benefit claimants in the private sector. In NI, of the people in private rental identified in the preceding section as being *at-risk-of-poverty after housing costs*, 46.8% were in receipt of housing benefit. The proportion of *at-risk-of-poverty after housing costs* in the social rented sector in receipt of housing benefit was only 31%. Furthermore, not only are at-risk households in the private sector more likely to be in receipt of housing benefit, they also require a higher level of Housing Benefit. The average housing benefit payment to an at-risk household in the social rented sector is £77 per week, while at-risk-of-poverty household in the private rented sector is £87 per week. This is intuitive given that average housing costs are higher for private tenants. However, it does show the potential saving that can be made by moving at

risk households to the social rented sector.

As mentioned in the previous section the NIHE has been prevented from building new social housing since 2001. Under current policy arrangements, it would therefore be Housing Associations that would provide any new social housing. Housing Associations have faced no real barriers to new development in the years since 2011 yet they have consistently failed to provide the scale of new development required in NI. The inability of Housing Associations to provide adequate supply over the last number of years bodes ill for their capacity to do it in the futures. In reality, only the NIHE has the scale of both assets and operational capacity to deliver a significant increase in supply.

The key difference between the NIHE and Housing Associations in terms of new supply is borrowing. The NIHE at present is constrained from borrowing as its borrowing costs would be accounted for as general government debt. This has implications for the UK public finances and therefore is not in the gift of the NI Executive. However, the classification of NIHE debt as public-sector debt is policy choice, not an inevitability as evidenced by the decision of the Office for National Statistics to reclassify Housing Association debt as public debt in 2016. This decision was reversed after several policy changes were made by the NI Executive. These same policy changes could therefore be applied to the NIHE and remove the borrowing cap.

Such a policy move is necessary for the longer term also. Whilst enabling a new programme of housebuilding by the NIHE is necessary to alleviate housing induced poverty, this will not be the panacea for NI's housing market. In order to avoid the scale of crisis currently affecting other regions such as the ROI, NI needs to take policy measures to ensure a more stable and sustainable model of housing supply in the future. Goldrick-Kelly and Healy (2017) outline a European Cost Rental model of housing as a means of both stabilising and transforming the delivery of housing in the ROI. Based on this model we would recommend that in the medium to long term, a reformed NIHE should see its role expanded beyond low-income housing provision to include interventions in both the owner-occupier and the private rental market.

5. CONCLUSION

This paper set out to assess the sufficiency and affordability of housing in Northern Ireland and the implications which housing costs have for living standards. The analysis showed that looking at the supply and demand of housing there appears to be little mismatch between regions in

terms of overall housing provision, in that the overall supply of housing appears to be matching population change quite well across regions. However, in assessing the sufficiency of different types of housing the evidence shows that there is a considerable shortage of supply of social housing in regions where demand is highest. This is in spite of the fact that the regions with the highest demand for social housing are also the regions with the largest per population increase in social housing. Thus, whilst on the whole new social housing dwellings appear to be well-matched regionally, the scale of new social dwellings is not of the same order as the demand for social housing, as expressed in waiting lists.

In terms of affordability, on the whole, housing in Northern Ireland appears to be relatively affordable. Yet, this paper shows that the living standards of particular groups at the margins are significantly impacted by housing costs. This is particularly the case for low income households in the private rented sector, who face a particularly high housing cost burden and a high risk of poverty. Moreover, the evidence in this paper shows that poverty amongst low income households in the private rented sector is not compounded by other factors. Indeed, large proportions of these households are in work, are young, are in single or couple households, and in good health. Thus, for those on low incomes in the private rental sector, it is housing costs *per se* that are key in terms of the negative impact on living standards. The evidence suggests that the social rented sector should be expanded to include these households, rather than seeking to intervene in the private rental market.

REFERENCES

- Gabriel, M., Jacobs, K., Arthurson, K., Burke, T., and Yates, J. (2005) *Conceptualising and measuring the housing affordability problem*, National Research Venture 3: Housing Affordability for Lower Income Australians, Research Paper 1, Sydney: Australian Housing and Urban Research Institute.
- Bramley, G. (1994) 'An affordability crisis in British Housing: Dimensions, causes and policy impact', *Housing Studies*, 9(1): 103-124.
- Bramley, G. (2012) 'Affordability, Poverty and Housing Need: Triangulating Measures and Standards', *Journal of Housing and the Built Environment*, 27(2): 133-151.
- Chen, J., Hao, Q. and Stephens, M. (2009) 'Assessing Housing Affordability in Post-reform China: A Case Study of Shanghai', *Housing Studies*, 25(6): 877-901.
- Chartered Institute of Housing (2010) Report of the Independent Commission on the Future for Housing in Northern Ireland. Available online at: <http://www.cih.org/resources/PDF/NI%20policy%20docs/Housing%20Commission%20Report.pdf> Last accessed on: 10.4.18.
- Chartered Institute of Housing (2012) *Making the most of Northern Ireland's Private Rented Sector to Meet Housing Need*, Chartered Institute of Housing, Department for Social Development. Available online at: <http://www.cih.org/resources/PDF/NI%20policy%20docs/Making%20the%20most%20of%20NI%20private%20rented%20sector%20to%20meet%20need.pdf> Last accessed on: 7.3.18.
- Coley, R.L., Leventhal, T., Doyle Lynch, A., and Kull, M. (2013) *Poor Quality Housing is Tied to Children's Emotional and Behavioural Problems*, Policy Research Brief, MacArthur Foundation.
- Cribb, J., Hood, A. and Hoyle, J. (2018) *The decline of homeownership among young adults*, Institute for Fiscal Studies, Briefing Note BN224. Available online at: <https://www.ifs.org.uk/publications/10505> Last accessed on: 10.4.18.
- Department for Communities (2017) *Northern Ireland Housing Statistics 2016-17*, NISRA. Available online at: https://www.communities-ni.gov.uk/sites/default/files/publications/communities/NI%20Housing%20Statistics%202016-17%20%28pdf%20full%20copy%29%20-%20Jan18_0.pdf Last accessed on: 7.3.18.
- Department for Communities and Local Government (2007) *Strategic housing market assessments: practical guidance*, Department for Communities and Local Government.
- Ellison, A., Pleace, N., and Hanvey, E. (2012) *Meeting the housing needs of vulnerable homeless people in the private rented sector in Northern Ireland*, Housing Rights Service, The University of York. Available online at: <https://www.housingrights.org.uk/sites/default/files/policydocs/Meeting%20the%20Housing%20Needs%20of%20Vulnerable%20People.pdf> Last accessed on: 7.3.18.
- Eurostat (2014) *Housing statistics*, Eurostat. Available online at: http://ec.europa.eu/eurostat/statistics-explained/index.php/Housing_statistics Last accessed on: 8.3.18.
- Eurostat (2017) *People at risk of poverty or social exclusion*, Eurostat. Available online at: http://ec.europa.eu/eurostat/statistics-explained/index.php/People_at_risk_of_poverty_or_social_exclusion Last accessed on 28.2.18.
- Healy, T. and Goldrick-Kelly, P. (2017) *Ireland's Housing Emergency – Time for a Game Changer*, NERI WP 2017/41, Dublin: NERI. Available online: https://www.nerinstitute.net/download/pdf/irelands_housing_emergency_time_for_a_game_changer.pdf Last accessed on: 1.3.18.
- Hearne, R. (2017) *A home or a wealth generator? Inequality, financialization and the Irish housing crisis*, Dublin: TASC. Available online at:

https://www.tasc.ie/download/pdf/a_home_or_a_wealth_generator_inequality_financialisation_and_the_irish_housing_crisis.pdf Last accessed on: 6.3.18.

Housing Agency (2015) *National Statement of Housing Supply and Demand 2014, and Outlook for 2015-2017*, Housing Agency.

Jones, C., Watkins, D., Watkins, C., and Dunse, N. (2010) *Affordability and Housing Market Areas*, London: CLG.

Joyce, R., Mitchell, M. and Norris Keiller, A. (2017) *The cost of housing for low-income renters*, London: Institute for Fiscal Studies.

Kutty, N.K. (2010) 'A new measure of housing affordability: Estimates and analytical results', *Housing Policy Debate*, 16(1): 113-142.

Marmot, M. (2011) *Fair society, health lives*, Strategic Review of Health Inequalities in England post-2010, London: UK Parliament. Available online at:

<http://www.parliament.uk/documents/fair-society-healthy-lives-full-report.pdf> Last accessed on: 1.03.18.

Paris, C., Palmer, J., and Williams, P. (2014) *Demographic change and Future housing need in Northern Ireland*, Final Report, Northern Ireland Housing Executive.

OECD (2011) *How's Life? Measuring well-being*, OECD Publishing.

Payne, S. (1999) *Poverty, social exclusion and mental health: findings from the 1999 PSE Survey*, Bristol: Bristol University.

Resolution Foundation (2016) *The housing headwind: the impact of rising housing costs on UK living standards*, London: Resolution Foundation.

Tunstall, R., Bevan, M., Bradshaw, J., Croucher, K., Duffy, S., Hunter, C., Jones, A., Rugg, J., Wallace, A., and Wilcox, S. (2013) *The links between housing and poverty: An evidence review*, Joseph Rowntree Foundation.

Savills (2017) *On track to solving the housing crisis?*, Spotlight, Savills World Research UK Development. Available online at: <http://pdf.euro.savills.co.uk/uk/spotlight-on/spotlight-uk-development-2017.pdf> Last accessed on: 5.3.18.

Shelter (2012) *Housing in transition: Understanding the dynamics of tenure change*, Summary Report, Resolution Foundation.

Smyth, S. (2013) *Keeping our Housing Public*, NIPSA.

Smyth, S. (2017) *Our Homes, Our Future: Protecting Public Housing*, NIPSA.

Solari, C.D. and Mare, R.D. (2012) 'Housing crowding effects on children's wellbeing', *Social Science Research*, 41(2): 464-476.

Stone, M. (1993) *Shelter Poverty: New Ideas on Housing Affordability*, Philadelphia: Temple University Press.

Stone, M. (2006) 'What is housing affordability? The case for the residual income approach', *Housing Policy Debate*, 17(1): 151-184.

Stone, M., Burke, T., and Ralston, I. (2011) *The residual income approach to housing affordability: The theory and the practice*, Positioning paper No. 139. Melbourne: Australian Housing and Urban Research Institute.

Wilson, W. and Morgan, B. (1998) *Rent levels, affordability and housing benefit*, Research Paper 98/69, UK Parliament: House of Commons Library.

Yang, Z. and Chen, J. (2014) *Housing Affordability and Housing Policy in Urban China*, Berlin: Springer.

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