Methodology: calculating the future pensioner housing benefit bill

In order to estimate the size of the pensioner housing benefit bill in 2060 we need a number of pieces of information:

1. The size of the pensioner population that rents their home (both in the socially rented sector and in the private rented sector).
2. The proportion of this population that claims housing benefit.
3. The average, per claimant, spend on housing benefit for private and social tenants.

Below we go through all these three assumptions and how we calculate the necessary figures.

The size of the pensioner population that rents their home

To estimate what share of future pensioner cohorts will own their own home, and what share will rent we start by using our current projections for homeownership rates at 35-45 for those born between 1981 and 1991.[1] The 'optimistic' projection estimates that 64 per cent of those born between 1981 and 1991 will own their own home by the time they reach 45 and 48 per cent under the 'pessimistic' projection. However these are ownership rates at 45 and through inheritance we can perhaps expect more millennials to get onto the housing ladder before retirement.

To estimate the impact that inheritance could have on increasing the homeownership rate for these cohorts we draw upon our research into inheritances.[2] This research suggest that 52 per cent of non-homeowners at ages 21-35 have homeowning parents. Between the ages of 18 and 35 people whose parents owned property were 2.6 times more likely to buy a home than those with parents who did not own property. In order to estimate the share of people who do not own property at 45, but whose parents do, we need to make an assumption about what proportion of those purchasing property between ages 35 and 45 have homeowning parents. We know that between the ages of 18 and 35 those with parental property wealth were 2.6 times more likely to purchase, however as people age the role of parental property wealth clearly becomes less important in determining their own propensity to buy. Therefore we assume that between the ages of 35 and 45, people with parental property wealth are just twice as likely to purchase property as those without.

The result is that – under the optimistic scenario – at 45, 12 per cent of the benefit units in the millennial generation do not own their own home while also having parental property wealth. Under the pessimistic scenario this figure is 23 per cent (because fewer were able to buy property before 45).

We then need to work out what proportion of these people will use their parental property wealth to purchase property themselves. Some will inherit too little. Based on the fact that the typical amount of equity in a property bought by a first time buyer over 45 in 2015-16 was £150,000[3] we assume that an individual (assuming they couple with someone who also inherits) would need to inherit at least £50,000 to have a chance of ownership. Setting this as a cut-off means that we exclude 20 per cent of millennials who – at 45 – have parental

---

[1] These are drawn from A Corlett & L Judge, *Home Affront: housing across the generations*, Resolution Foundation, September 2017

[2] L Gardiner, *The million dollar be-question: inheritances, gifts, and their implications for generational living standards*, Resolution Foundation, December 2017

[3] RF analysis of ONS, English Housing Survey 2015-16

property wealth of less than this. The result is that the 12 and 23 per cent figures above are reduced to 11 and 21 per cent respectively.[4]

Including these people in our previous estimates of homeownership (64 per cent and 48 per cent) raises the ownership rate of those aged 66 to 80 in 2060 to 73 per cent (under the optimistic scenario) and 66 per cent (under the pessimistic scenario), this compares to 77 per cent of families for the current generation of pensioners.

Knowing what share of millennial pensioners will not own their own home in retirement we also need to make an assumption about what proportion will rent privately and what proportion will rent socially. We make the assumption that the current *percentage share* of pensioners in the social rented sector stays constant (e.g. currently 18 per cent of pensioners rent socially and it remains so in future). The result is that all of the percentage growth in pensioners who rent is in the private sector. The result is that under our optimistic scenario 9 per cent of pensioners rent privately in 2060 and this figure is 16 per cent under the pessimistic scenario.

So far all the analysis that we have done has been on the benefit unit level. Having estimated the proportion of pensioner benefit units that are renting in retirement we now need to estimate the number that will do so. To do this requires using the Household Projections produced by DCLG. These projections estimate the household population up to 2039 for England and from this data we can estimate benefit unit numbers.[5] However, we need data for 2060, and for the whole of the UK, therefore to estimate the number of pensioner benefit units in the UK in 2039 we inflate the DCLG figures by the ratio of UK to England benefit units in 2015-16. In order to estimate the number of benefit units in 2060 we use the Population Projections produced by the ONS. Between 2016 and 2039 the growth in the pensioner population was similar to the growth in the number of pensioner benefit units and so we can be relatively confident that estimating the number of pensioner benefit units in 2060 using the population projections is valid.

Once we have done this we estimate that in 2060 of the 13.6 million pensioner benefit units, 4.6 million will rent under our pessimistic scenario and 3.6 million will do so under the optimistic scenario. This compares to 1.9 million (out of a population of 8 million) that currently rent.

The proportion of this population that claims housing benefit

We now need to estimate the proportion of the renting pensioner population that claims housing benefit. To do this we use the current ratio of housing benefit claimants to non-owners; 73 per cent, and apply this figure to the 2060 figures. The result is that, under our optimistic scenario, 2.6 million pensioner benefit units claim housing benefit, 870,000 in the private rented sector and 1.8 million in the socially rented sector. The respective figures are 3.3 million, 1.6 million and 1.8 million under the pessimistic scenario.

---

[4] Under the optimistic scenario, 36 per cent of millennials do not own at 45. Of these a third (33 per cent or 12 per cent of the overall total) have homeowning parents, but 20 per cent of these do not inherit enough to buy (0.2*0.33 = 7 per cent). These 7 per cent are then subtracted from the 12 per cent to give us our final total of 11 per cent of the total who we add to our previous homeownership rate at 45 to get to our homeownership rate in retirement of 74 per cent (due to rounding). Under the pessimistic scenario, 52 per cent of millennials do not own at 45. Of these 45 per cent (or 23 per cent of the overall total) have homeowning parents, but 20 per cent of these do not inherit enough to buy (0.2*0.45 = 9 per cent). These 9 per cent are then subtracted from 23 per cent to give us our final total of 21 per cent of the total who we add to our previous homeownership rate at 45 to get to our homeownership rate in retirement of 66 per cent (due to rounding).

[5] See DCLG, *2014-based household projections in England, 2014 to 2039*, 2016

It is important to note that this assumption relies on the fact that the pensioner population in 2060 is similar in terms of incomes and assets as the current generation of pensioners. If the pensioner population is, in relative terms compared to the working-age population, a lot better-off than today's pensioners then it is likely that a smaller proportion will claim housing benefit. We also assume that, relatively, policy is the same in 2060. For example one could assume that over time fewer pensioners will qualify for housing benefit because the system will become, relatively, less generous. The current asset limit for claiming housing benefit is £16,000, a figure that has remained the same (in cash terms) since its introduction (though this does not apply to pensioners with a Pension Credit Guarantee). We implicitly assume that this will be uprated in our estimates, if it remains the same in cash terms then clearly fewer people will qualify for housing benefit in future.

The average, per claimant, spend on housing benefit for private and social tenants

Once we have the figures for the number of pensioner benefit units that are claiming housing benefit in 2060 we need to estimate how much, on average, each claimant receives. To do this we take the current figures for the average amount of housing benefit awarded to retirees renting privately and socially (£94.71 and £84.99) from the DWP. In this sense the estimates we derive are expressed in today's cash terms, we are modelling how much would be spent on housing benefit in today's terms if we had the pensioner population of 2060. This allows us to isolate the effect of a larger renting population, aside from the impact of any policy or economic changes.

Again it could be argued that pensioners will receive, on average, less housing benefit in future than they do now. This is certainly possible, even aside from any policy changes (such as making the asset levels that impact the amount of housing benefit someone receives lower or making the overall awards lower), in a world in which the proportion of pensioners renting is far higher, the marginal 'renting' pensioner is likely to be wealthier and so qualify for less housing benefit. However, on the other hand a lower proportion of pensioners may rent socially in future, and this would push average spend up. Without having a sensible estimate of the size of these countervailing impacts we stick with the figures on current average award.

Results

In calculating these figures we do not just multiply the numbers of pensioner benefit units claiming housing benefit in 2060 by the average awards. We adjust this figure by first calculating a ratio based on our calculation of the current pensioner housing benefit bill (using figures on claimants and average award) and the official published figures (our estimate of current spend is £6.21 billion, similar to the published figure of £6.33 billion). The result is a ratio of 1.019 which we apply to our 2060 estimates to 'anchor' them to current published figures.

A full table of results are presented below. The second and third rows take into account growth in the pensioner population between now and 2060. The fifth and sixth rows strip out the impact of an ageing population, while the seventh row isolates the impact of just an ageing population by holding tenure constant.

Table 1: Spending on housing benefit for pensioners is set to rise

Scenario	Spending on pensioner housing benefit per annum		Increase	
	2016	2060	Percentage	Cash
Optimistic	£6.3 bn	£12.2 bn	92.8%	£5.9 bn
Pessimistic	£6.3 bn	£16.0 bn	153.4%	£9.7 bn
Optimistic (population held constant)	£6.3 bn	£7.2 bn	13.6%	£0.9 bn
Pessimistic (population held constant)	£6.3 bn	£9.5 bn	49.3%	£3.1 bn
Tenure held constant	£6.3 bn	£10.7 bn	69.7%	£4.4 bn

Source: RF analysis (see above)