Housing wealth, income and financial wealth of older people in Britain

RUTH HANCOCK*

ABSTRACT

This paper explores the housing wealth of older people in Britain in relation to their incomes and financial wealth. Family Expenditure Survey data for 1992/3 to 1993/4 are used to assess the extent to which housing wealth could alleviate income poverty in old age. A range of poverty and housing wealth thresholds are used. Although housing wealth increases with both income and financial wealth, the analysis suggests that there are non-negligible proportions of low income older people who could generate small supplements to their incomes by converting the wealth tied up in their homes into an income stream, but in few cases would this be sufficient to pay for long-term residential care for any length of time.

KEY WORDS – older people, income, wealth, housing, housing wealth, poverty, property values.

Introduction

For some years there has been interest in the effects of more widespread home ownership in Britain. Many studies have concentrated on the home as a financial asset since for many home-owners it represents their most, if not only, significant financial asset. Increasing home ownership must therefore have had some effect on the distribution of wealth. In 1978, Atkinson and Harrison found that the share of personal wealth held by the top one per cent of the British population fell by about 0.4 per cent a year in the 50 years after 1923. Examining the possible explanations, they identified the increased value of owner-occupied homes – a consequence of more owner-occupation and rising house prices – as one of the likely causes (Atkinson and Harrison 1978). Hamnett (1990) explored the effect of wider home-ownership and its potential for increased inheritances, on class divisions in wealth holdings, concluding 'while the class divisions of housing wealth and inheritance are changing, they are not withering away...' (1990: 535).

* Age Concern Institute of Gerontology, King's College, London.

A second and closely related strand of research has been concerned with the extent to which owning one's home may mitigate low income, an issue of particular interest at a time when income inequality has been rising in Britain. After a decade in which incomes had become more equal, the 1980s was one in which inequality in British incomes increased (Goodman and Webb 1994). But growth in owneroccupation continued, encouraged by various policy measures. It is therefore relevant indeed to ask what financial benefits, if any, this growth may have had for some of the poorer members of society. Such benefits could take forms other than those arising directly from the ownership of a valuable asset. For example, owner-occupation may be a route to better housing; or to more control over one's living environment; or it may be valued as something to pass on to one's children. Of course there may be offsetting financial and other costs, such as the burdens of repair and maintenance. Here, however, we focus on the potential financial benefits that owning a valuable asset brings to the owner-occupier, him or herself, although this is only one aspect of the overall balance of costs and benefits which accompany home-ownership. We use new information on property values which was collected in the Family Expenditure Survey for the first time in 1992, providing an opportunity to revisit this subject.

Many of the potential financial benefits of owner-occupation come in later life. Older owner-occupiers are likely to have paid off their mortgages or have mortgages which are small in relation to the market value of their homes. Thus they may have substantial amounts of equity tied up in their homes. Despite improvements in average pensioner incomes, the gap between rich and poor pensioners widened considerably in the 1980s (Hancock and Weir 1994; Johnson *et al.* 1996) and Britain's older population remains over-represented in the lower parts of the income distribution. Whether the capital value of the homes of low-income pensioners can be used to supplement their modest incomes or help meet the costs of eventualities such as a need for long-term residential care, is thus a question of considerable relevance which has already generated a body of research in Britain and elsewhere (Leather and Wheeler 1988; Leather 1990; Venti and Wise 1991; Mullings and Hamnett 1992; Gibbs and Oldman 1993; Jacobs 1996). Those who have tried to answer this question have generally concluded that the scope for such equity release in Britain is less than sometimes assumed since there are still substantial proportions of older people who do not own their homes and, so far as can be deduced, levels of housing equity among older home owners are quite modest.

In 1989 Bull and Poole (1989) were among the first to highlight the plight of 'house rich, income poor' older people who have valuable assets in their homes, but living standards constrained by low incomes. The question of whether there are – or in the future will be – considerable numbers of older people who are income-poor but house-rich is of continuing relevance both for housing policy and for policies which affect incomes in retirement. In a recent analysis, Forrest and colleagues conclude that by 2011, 73 per cent of households headed by a person aged 60 and over will own their own homes compared with 65 per cent in 1996; in the age group 60–74 owner-occupation rates will reach 80 per cent by 2011; and the number of home-owners aged 85 and over will have increased by 81 per cent (Forrest *et al.* 1997: 5).

Although this paper does not address directly the mechanics of equity release schemes, the scope for older people to translate any housing equity into income, while remaining in their homes, depends on the operation of such schemes. A recent review of equity release schemes can be found in Terry (1997), while Davey (1996) discusses the supply and demand side of the UK market for equity release. For the purposes of the discussion in this paper the main features of equity release schemes are those set out by Leather (1990). In essence they involve mortgaging the home, or selling all or part of it to a scheme provider while continuing to live in one's home until death. Where a mortgage is taken out, it is repayable on death from the sale of the property. Usually interest is payable monthly on the mortgage. In some schemes interest is rolled-up until death and paid for from the sale of the property. In others the company takes a share in the appreciation of the value of the property instead of interest. Usually, the capital raised is used to purchase an annuity (an income for life). The size of this annuity depends on the purchaser's life expectancy so that in general it is only at the older ages (say 75 and over) that the size of the annuity makes such schemes worthwhile. Equity release schemes involve the consumption of some or all of the equity tied up in one's home, thereby reducing or eliminating the housing wealth which can be bequeathed to one's heirs.

All previous studies in this area have been hampered by the lack of data on the value of older (and younger) people's homes and the difficulties inherent in collecting such data. Nevertheless, efforts are now being made to gather information in household surveys which can be used, albeit imperfectly, to estimate the capital value of respondents' homes. See, for example, Holmans and Frosztega (1996) who use the General Household and Family Expenditure Surveys, and Hamnett and Seavers (1996) and Banks *et al.* (1994), two studies that draw on

the British Household Panel Survey for their information on housing wealth. This paper adds to and extends the on-going work in this area, looking specifically at older people and, within the older population, at the younger and older age groups. It uses the Family Expenditure Survey (FES). Although the FES has only recently collected information from which to make a direct estimate of housing wealth, it has a long record of collecting income data and is generally regarded as one of the best sources of British data on incomes. It also provides data from which to estimate financial assets and so permits an exploration of the relationship between housing wealth, financial wealth and income. It enables us to revisit the question of whether there exists in Britain today, a sizeable group of older people who are income-poor but house-rich.

The next section contains a discussion of the data, definitions and methods which form the basis of analyses presented subsequently. Estimating housing wealth is not straightforward, and an appreciation of the strengths and weaknesses of the approach used is important. The following section provides a brief overview of patterns of owneroccupation among older people, including the relationship between owner-occupation and incomes in later life. The main analysis of housing wealth and its relationship to income and financial wealth follows prior to a concluding section.

Data, definitions and methodology

The Family Expenditure Survey

The Family Expenditure Survey is a long-standing survey of UK households which collects information on the incomes, expenditures and personal characteristics of around 7,000 households and all their members. It has been used widely in official and other analyses of income distribution: the Department of Social Security's *Households Below Average Income* (HBAI) series, Cowell *et al.* (1996) and Goodman and Webb (1994) are a few recent examples. The FES income data have been well tried and tested, and generally found to be of high quality (Atkinson and Micklewright 1983; Redmond and Wilson 1995). In the analysis reported here, two years' worth of data were combined to produce data spanning the period April 1992 to March 1994, in order to increase sample sizes and permit some separate examination of the oldest age groups. The analysis is restricted to households in Great Britain; those living in Northern Ireland are

excluded. The FES is a survey of the private household population so people living in institutional settings are not covered. It is important to bear in mind that the proportion of people living in institutions rises sharply at the oldest ages. At the time of the 1991 British Census of Population (OPCS 1993), five per cent of people aged 65 and over were living in a communal establishment, such as a residential or nursing home, or a long-stay hospital. For those aged 80 and over the proportion was 15 per cent. The omission of this group from the analysis presented below could be important if patterns of income and wealth among them differ from those found for the household population. While this is quite likely, there is little information available on the finances of older people living in residential settings with which to assess the effect of this omission (see Evans 1995).

Estimating house values and housing equity

The method used to estimate housing value is in principle very simple. I have used it previously (Hancock 1995), and it is the same in general terms as the 'Adjusted Purchase Price' (APP) method used by Hamnett and Seavers (1996) and by Holmans and Frosztega (1996). Since 1992, the FES has asked all owner-occupiers – whether outright or with a mortgage – the original purchase price of their home and the year in which it was purchased. For each owner-occupier we inflate (or deflate) the reported purchase price by an index of movements in house prices since then, to arrive at an estimate of the current (average 1994) market value of the home. All households in the FES who have a mortgage are asked how much of the mortgage is outstanding. Deducting the amount of outstanding mortgage then produces an estimate of the amount of equity each respondent has tied up in his or her home. Since house price movements have varied greatly by region, a regional house price index is used covering the eleven standard regions of Great Britain.

There are a number of weaknesses in principle and practice with this approach. Not all respondents were able to give the original purchase price of their homes. This was the case more often for people aged 80 and over than for other age groups. It is possible that among this age group a greater proportion had inherited their homes and had never known its purchase price. Cases where no purchase price was given have had to be excluded from the analysis. Another problem concerns the situation where the original purchase price was below the market value. This will have been common for those who have bought their homes as sitting tenants at discounted prices either from local

authorities under the 'right-to-buy' legislation or from private landlords. Analysis of the 1993/4 General Household Survey revealed that the proportion of older home-owners who had bought their present home under the right-to-buy varied from 11 per cent in the agegroups 55–59 and 75–79, to nearly 16 per cent among those aged 60–64 years. Unfortunately we cannot identify FES respondents who bought in this way. A different problem concerns leasehold properties (mainly flats or apartments). Where the lease has become relatively short, the APP method will tend to overestimate the current market value of such properties. Again we have no way of identifying leasehold properties in the FES, still less how long their leases have left to run.

Nor is it possible to take any account of the condition of the home (which may have been improved or allowed to deteriorate). In addition, trends in house prices have in fact been very localised as some areas have come into or gone out of fashion so that the application of a regional house price can only approximate likely increases in house values. Moreover, a consistent regional house price index exists only for years since 1969. The earliest year of purchase recorded in the data is 1925. For 1925–1959 a single index was used for all regions; from 1959–1969 some variation between North and South was allowed for. Both these are based on the work of Holmans (1990) with some interpolation for years not covered. The Department of the Environment's mix-adjusted regional house price index was used for 1969 onwards.

A further problem relates to endowment mortgages, where the amount outstanding remains at the original level until the endowment policy matures and the whole of the mortgage is repaid. The value of this equity is uncertain until the policy is redeemed, and early redemption usually yields significantly less than the maturity value. Thus it is not clear how best to treat the equity tied up in such policies (see Hamnett and Seavers 1996). Here we ignore it altogether.

Because of these potential problems a number of checks on the estimates of house value and housing equity were undertaken. These involved testing for overall plausibility and internal consistency; comparisons with external information on the value of houses sold; comparisons with reported council tax bands¹ where available; comparisons with alternative methods (notably Hills 1991) and similar methods (Hamnett and Seavers 1996). These gave general confidence in the estimates, although the problems outlined above need to be borne in mind. In order to remove the effects of extreme outliers, cases with estimated house values in the lowest and highest one per cent of the distribution were excluded from the main analyses.

Defining a home-owner

Most previous analysis in this area has been conducted at the level of the household. Where analysed by personal characteristics, these have related to the head of household. This approach has a number of limitations. As others have pointed out, the conventional bias in surveys towards classifying men rather than women as heads of households obscures the position of many women. A second consideration is that many homes are owned jointly by two or more people. A household-based analysis thus ignores the division of any housing wealth among joint owners. Thirdly, since many homes are inhabited by others with no direct financial stake in them, the position of these 'non-householders' is also ignored. Typically, these non-householders are children and young adults living in their parents' home, but they can also be older people living in the homes of their children or other relatives. For these reasons we adopt a definition of a home-owner which can be implemented at the individual level. First, each person is classified as a householder or not. We define the head of household² and his/her spouse/partner as householders and all other household members as non-householders. This is likely to capture most people who own at least a share of the property in which they live. A homeowner is then a householder, living in a home which is owned-outright or being purchased with a mortgage.

We thus take the individual as our unit of analysis. Where there are two home-owners (defined as above) in a household we attribute the estimated value of the home to both of them. However, the worth of any given level of equity will differ between single people and couples. If we imagine an income stream generated by this equity, it will have to be shared by two people in the case of a couple, but only one person in the case of a single person. For this reason we 'equivalise' the equity level in the same way as we do for income (see below)³. If equity were being released to pay for residential care for one partner, it might be appropriate to adopt a different approach, but it would also be necessary to consider the wider implications for each partner's income of one spouse being admitted to long-term residential care.

Measuring income

One of the issues which has received a great deal of attention in the British literature is the treatment of housing expenditure (see in particular Johnson and Webb 1992, and Gardiner *et al.* 1995) when using income as a measure of welfare. The issue arises for a number of

reasons which are important in the present context. First, housing expenditure typically forms a relatively large share of total household expenditure and is difficult to change in the short to medium term. Moreover, distortions in the housing market mean that differences in households' housing expenditure⁴ cannot be assumed to reflect only variations in the size or quality of housing which they occupy and hence in the welfare they derive from that housing. Britain's extensive system of housing benefits, which meet substantial proportions of the rents and council tax liabilities of lower income households, is another consideration. Simply treating these benefits as a form of income, without deducted housing costs, can be misleading: higher incomes may just reflect higher housing costs. There is no state help with mortgage costs for owner-occupiers (apart from tax relief on mortgage interest) unless they qualify for Income Support (means-tested social assistance). In such cases the help with housing costs is recorded in the FES with the rest of their Income Support and cannot easily be separated. In many respects, therefore, income after housing costs is preferable to income before housing costs. However, the arguments are not clear cut, and so we conducted some analyses using both measures. Our before-housing costs measure excluded any housing benefit (but included any help received by mortgagors through Income Support). The after-housing costs measure added in any housing benefits and deducted housing costs. The results and conclusions are in fact similar using the before and after housing cost measures. Given some preference for income after housing costs, the results presented below concentrate on that measure. Income is expressed in average 1994 prices⁵.

The incomes of all family members (single person or couple plus any dependent children) are aggregated and adjusted to a per equivalent adult basis, using an equivalence scale of 1 for the first adult in the family, 0.7 for each subsequent adult or child aged 14 or over, and 0.5 for each child aged under 14. This is then ascribed to each family member. We effectively assume that the standard of living derived from income is the same for each person in the family, but acknowledge the weaknesses of this assumption (Pahl 1990).

Estimating financial wealth

Financial wealth is inferred by grossing-up reported investment income according to prevailing interest rates. For simplicity a single indicator of interest rates representing the average rate offered by building societies on ordinary share accounts is used. The main form of interest income recorded by older respondents in the FES is from building society accounts, so the consequences of this simplification should not be too serious. However, the resulting estimate is clearly only approximate and excludes any capital assets which do not generate an income stream but, for example, just produce capital gains. Financial wealth is equivalised in the same way as income and housing wealth.

Patterns of home-ownership among Britain's older population

Table 1 shows for our sample how men and women aged 50 and over were distributed according to owner-occupier and householder status. For interest, we also add some detail for non-householders which tells us what proportions were living with their parents, children or someone else. Among this older section of the population, rates of ownership fall with age. This does not imply substantial exits from home-ownership at older ages. Rather, the growth in home-ownership this century has been driven by an increasing proportion of younger generations becoming home-owners in the first place, and doing so at younger and younger ages. Figures for the whole adult age range show owneroccupation rates peaking at 80 per cent in the age group 45-49. There is however a marked increase at the oldest age groups, particularly for women, in the proportions who are not householders. In our sample, approximately one in five⁶ women aged 85 and over were nonhouseholders, most of them living in housing headed by a son or daughter. It is likely that many of these older non-householders were once householders and indeed a proportion no doubt once owned their own homes.

Among women aged 80 and over and men aged 85 and over, owneroccupiers are a minority, but a substantial one. At all younger ages, owner-occupiers form the majority and unless significant numbers of those aged 50–59 cease to be owner-occupiers, between 70 and 80 per cent of those aged 60 to 70 in ten years time, will be home owners.

The potential for housing equity to alleviate low incomes among older people depends, of course, on the proportion of low income older people who are owner-occupiers. Table 2 contrasts the proportions of low and high income older people who are owner-occupiers with those for all income groups. Low income is taken to be having an income which is in the lowest quintile (fifth) of the all-adult distribution of income after housing costs. High income is indicated by the highest income quintile. In the lowest two age-groups (50–64 and 65–79) it is clear that those on high incomes are considerably more likely to own

		Age group (years)						
	50-54	$55^{-}59$	60-64	65-69	70-74	75-79	80-84	85+
				0	6			
Men:								
Owner:	79	77	7^{2}	68	65	59	60	49
Other householder	18	20	25	31	33	38	34	45
Non-householder, parent of hoh	0	*	Ι	*	Ι	Ι	4	4
Non-householder, son/daughter of hoh	2	2	*	*	0	0	0	0
Non-householder, other	Ι	Ι	2	Ι	Ι	2	Ι	2
All non-householders	3	3	3	Ι	3	3	5	6
Total (= 100 $\%)$	856	837	786	812	678	405	232	131
Women:								
Owner	79	72	7^{2}	64	59	51	46	40
Other householder	18	24	24	33	37	43	43	41
Non-householder, parent of hoh	Ι	I	I	I	3	5	7	17
Non-householder, son/daughter of hoh	Ι	2	*	*	*	0	0	0
Non-householder, other	*	Ι	2	2	Ι	Ι	3	Ι
All non-householders	2	3	3	3	4	6	ΙI	19
$\mathrm{Total}~(=100\text{\%})$	829	876	877	842	828	619	374	22 I

TABLE 1. Owner-occupier and householder status by age group, people aged50 and over; GB 1992/3-1993/4

Note: Parent/son/daughter includes in-laws.

* Less than 0.5%.

Percentages are subject to rounding error.

Source: Analysis of Family Expenditure Surveys.

their homes than those on the lowest incomes. In the highest income group, over 90 per cent of men and women in these age groups own their homes. But the proportions of low income older people who are owner-occupiers are also substantial; over half of low income 50–64 year-olds and around 40 per cent of low-income 65–69 year-olds own their homes. Small sample sizes hamper the analysis for people aged 80 and over. We are not able to present proportions for the highest income group. However, this reflects the fact that only very small proportions of men and women in this age group have such high incomes – around 5 per cent in both cases. Nonetheless, it is worth noting that the proportion of low income men aged 80 and over who are owneroccupiers is only marginally lower than that for all income groups, and for women aged 80 and over it is actually higher.

	Age group (years)				
	50-64	65-79	80+		
		%			
Men:					
Lowest income quintile					
owner with mortgage	35	14	8		
outright owner	23	32	47		
owned outright/with mortgage	57	46	55		
N (= 100 %)	421	118	53		
Highest quintile	-		00		
owner with mortgage	53	6			
outright owner	40	87			
owned outright/with mortgage	93	94			
N (= 100 %)	725	311	40		
All income groups	, 5	5	1		
owner with mortgage	42	7	2		
outright owner	34	58	54		
owned outright/with mortgage	76	65^{-5}	56		
N (= 100%)	2,479	1,895	365		
Women:					
Lowest income quintile					
owner with mortgage	33	9	7		
outright owner	27	29	46		
owned outright/with mortgage	59	38	54		
N (= 100 %)	359	235	71		
Highest quintile	333	.00	,		
owner with mortgage	42	6			
outright owner	50	86			
owned outright/with mortgage	92	92			
N (= 100%)	680	264	32		
All income groups	000	20T	34		
owner with mortgage	99	5	3		
outright owner	33	5			
owned outright/with mortgage	42	54 58	41 44		
	75	0	44		
N $(= 100 \%)$	2,582	2,289	595		

TABLE 2. Proportion of lowest and highest income quintiles who are owneroccupiers, by gender and age group, people aged 50 and over; GB 1992/3-1993/4

Note: Income is after housing costs.

Percentages are subject to rounding error.

Source: Analysis of Family Expenditure Surveys.

Housing wealth, income and financial capital

The distribution of housing equity amongst the older population

The distributions of estimated house values and housing equity are shown in Figure 1 and Figure 2, based on kernel density estimates⁷, for three age groups. In these graphs, the area between any two points on the horizontal axis is an estimate of the proportion of home-owners

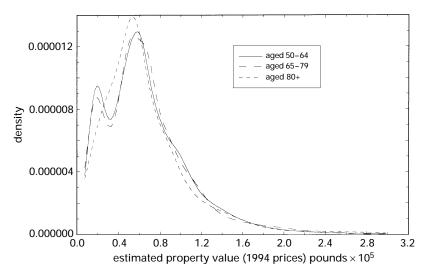


Figure 1. Distribution of estimated house values among older owner-occupiers, Great Britain, 1992/3 and 1993/4 combined.

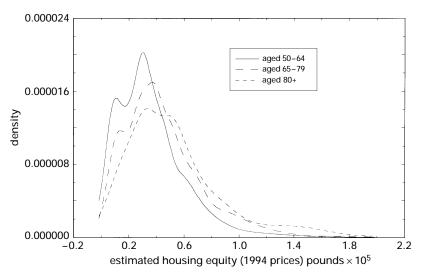


Figure 2. Distribution of housing equity among older owner-occupiers, Great Britain, 1992/3 and 1993/4 combined.

with house values or equity within the range bounded by these two points. Both distributions have long right hand tails: most people have homes worth £40,000 to £80,000 and equity between £20,000 to £50,000 but a few have very valuable homes. There is some evidence

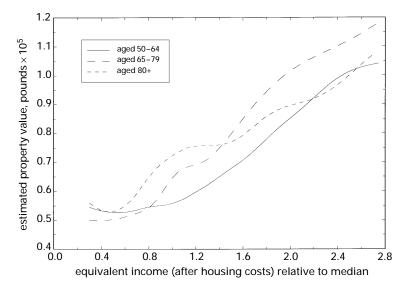


Figure 3. Estimated property values regressed on equivalent income, after housing costs: older owner-occupiers, GB, 1992/3 and 1993/4 combined.

for the younger two age-groups of a 'bump' at a quite low level of housing value. A possible explanation is that these are people who have bought at discounts as sitting tenants. If so, the value of their properties may be considerably underestimated, although Hamnett and Seavers (1996) provide evidence that even allowing for discounts, properties bought as sitting tenants tend to be worth less than other properties. Further investigation of this group will be the subject of future research.

The relationship between housing equity and income in the older population

Figure 3 plots the results of a non-parametric regression of estimated property values on income after housing costs. In the bivariate case such as we have here, such regressions yield an empirical estimate of the expected value of one variable (property value) conditional on the value of a second variable (income) but, unlike the more common parametric techniques, do not impose any particular functional form (linear, log-linear, etc.) on the relationship between the variables concerned. The regression estimates presented here follow the methodology set out in Pudney (1993). In Figure 3, we plot the estimates of property value for a range of income levels where income is expressed relative to the median level for all those aged 50 and over. As would be expected, and reassuringly, estimated property values increase with income (the general picture is similar when income

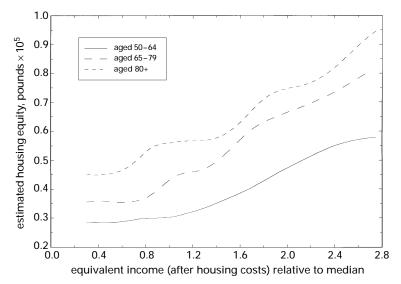


Figure 4. Estimated housing equity regressed on equivalent income, after housing costs: older owner-occupiers, GB, 1992/3 and 1993/4 combined.

before housing costs was used). The pattern for the three age-groups is perhaps a little surprising or erratic. Ignoring the very lowest income levels which (like the very highest) are subject to considerable sampling variation, at any given income level below 120–130 per cent of the median, those aged 80 years and over have the highest property values, followed by those aged 65–79 years. At higher income levels the position of these two groups is reversed.

A non-parametric regression of housing equity (as opposed to property values) on income is plotted in Figure 4. Again we see a general increase in equity with income but this time the pattern across age-groups is clearer and more along the lines we might expect. At any given income level, equity rises with age, largely because of the increasing proportion of owner-occupiers who are outright owners. Another feature of these figures stands out: despite the general increase in equity with income, at low levels of income, equity levels do not increase very fast. For example for people aged 80 and over with income between 40 per cent and 80 per cent of median income, equity levels are quite constant at around $\pounds 42,000$ to $\pounds 47,000$.

Financial wealth

To get a comprehensive picture of older people's financial resources we also need to consider their financial wealth. The proportion of older

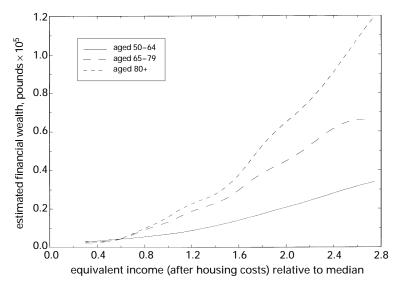


Figure 5. Estimated financial equity regressed on equivalent income after housing costs: older owner-occupiers, GB, 1992/3 and 1993/4 combined.

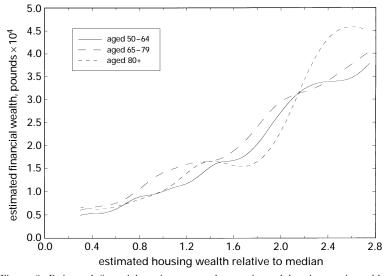


Figure 6. Estimated financial equity regressed on estimated housing equity: older owner-occupiers, GB, 1992/3 and 1993/4 combined.

people with income from savings has been increasing, although often the amounts of such income are very small (Hancock and Weir 1994). Figures 5 and 6 present non-parametric regressions of estimated financial equity on income and housing equity respectively. Financial

equity rises steadily with income. This is of course partly because financial equity generates a stream of income. Although not surprising, the degree to which older people with high incomes are so much more likely than those with low incomes to have high savings is striking. It is also interesting to note that at any given income level, financial equity seems to increase with age. The difference between the under 65age group and the 50–64 year old age group is perhaps not surprising. Financial equity may well receive a boost on retirement as a result of lump sum payments from pensions and maturation of other savings policies (including endowment policies taken out to cover mortgages). That financial equity is higher still at a given income level for the population aged 80 and over is perhaps more surprising. A possible explanation is that among this older generation, high incomes are more closely associated with high financial wealth than for younger generations where higher incomes are perhaps more likely to stem from good occupational pensions. The relationship between housing equity and financial equity is also a positive one but the differences between the age groups is less pronounced and not clear cut.

Taken together the analysis presented above has a simple and unsurprising conclusion. Housing wealth, financial wealth and income are all positively related. The highest levels of housing wealth and of financial wealth among older people will be found generally among those with the highest incomes. However, the regressions above convey only the average picture. Income-poor, house-rich older people may be atypical and in a minority but that does not necessarily mean they are negligible in number. Nor does it mean that they could not benefit from schemes to enable them to release some of the equity locked up in their homes. The crucial question is what proportion of low income older people could be classed as house-rich?

Income-poor, house-rich?

In order to address this question we must first decide what constitutes richness in housing wealth and poverty in income, since the answer may well be sensitive to such definitions. Better still, we can explore a range of definitions. In Figures 7a and 7b the proportion of older home-owners who are income-poor but house-rich is plotted, varying the definition of income poverty on the horizontal axes (expressing income in relation to the median income level), and using three cut-offs for the definition of house-rich based on the median and lower and upper quartiles of the distribution of housing equity among all owner-occupiers aged 50 and over. The lower quartile corresponds to housing

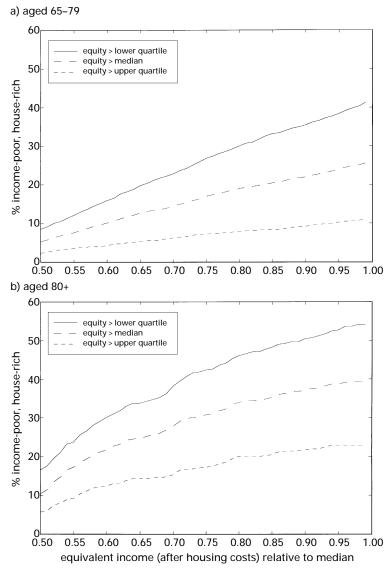


Figure 7. Proportion of older owner-occupiers who are income-poor but house-rich according to various thresholds, GB, 1992/3 and 1993/4 combined.

equity of about £18,500, the median to £31,250 and the upper to £49,600. The median income level is that for the distribution of income among owner-occupiers aged 50 years and over and corresponds to a weekly net income, after meeting housing costs, of about £120 (1994 prices). To set these in context, £30,000 would buy an annuity under

a) aged 65–79

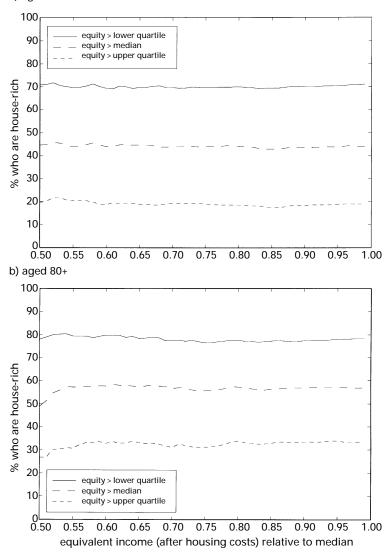


Figure 8. Proportion of income-poor older owner-occupiers who are house-rich according to various thresholds, GB, 1992/3 and 1993/4 combined.

a Home Income Plan (HIP) which would yield a monthly income of around £100 after tax for a single woman aged 75 (Hinton 1996); a small but useful addition to someone whose income is below £120 a week (£480 a month). £15,000 is usually about the minimum amount for a HIP. Alternatively, £30,000 would pay fees for about two years

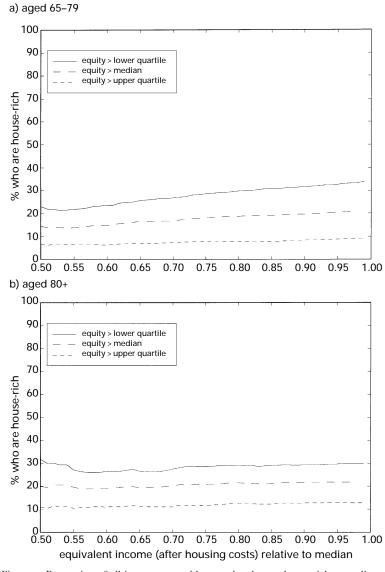


Figure 9. Proportion of all income-poor older people who are house-rich according to various thresholds, GB, 1992/3 and 1993/4 combined.

for a shared room in a private residential home or about 18 months for a single room in a private nursing home (based on Laing and Buisson 1996, Table 8.1).

The figures relate to home-owners aged 65–79 and those aged 80 and over since it is probably beyond retirement age that the potential for

equity release is of most relevance. Obviously the proportion of older owners who are income-poor but house-rich increases as we raise our definition of poverty and as we reduce our definition of housing-rich. But the figures enable us to quantify this relationship. For example if we adopt a definition of poverty of say 65 per cent of median income and regard housing wealth in excess of the median level as being housing rich, then we find that about 12 per cent of 65–79 year-old home-owners and just under a fifth of home-owners aged 80 and over would be classed as income-poor but housing-rich. If older people who do not own their homes are included, it is clear that, as a proportion of all older people, those who are income-poor but housing-rich form a smaller group, relatively. For example, just under 15 per cent of all people aged 80 and over have incomes below three-quarters of the median level but housing equity of at least the median level. For those aged 65–69 years the proportion is about 10 per cent.

However, this does not necessarily mean that the proportion of low income older people with significant housing wealth is small or that there are negligible benefits to be reaped from equity-release schemes for poorer older people. Figure 8 shows what proportion of poor older home-owners, varying the definition of poverty as before, would be classed as housing-rich according to different definitions of house-rich. Two facts stand out. First, the proportions of low income older homeowners with housing equity above the various thresholds are not insubstantial. Getting on for 60 per cent of home owners aged 80 or more with incomes in the lower half of the income distribution have housing equity of more than $f_{1,30,000}$. Second, these proportions are almost invariant to the income threshold used: at income levels below the median, the proportions with housing equity greater than the lower quartile, the median and the upper quartile of the housing equity distribution do not increase with income. This confirms what we saw earlier, that at low income levels there is rather little variation with respect to income in housing wealth. Expressed as proportions of all low income older people, including non-owners, the proportions who are house-rich are of course much smaller but by no means negligible (Figure 9). For the 65-79 age group these proportions rise slightly as the definition of income-poor is raised.

Housing equity among older men and women

All research has shown that older women tend to have lower incomes than older men (for example Ginn and Arber 1994). Because they live longer than men, there are more women in the oldest age groups and

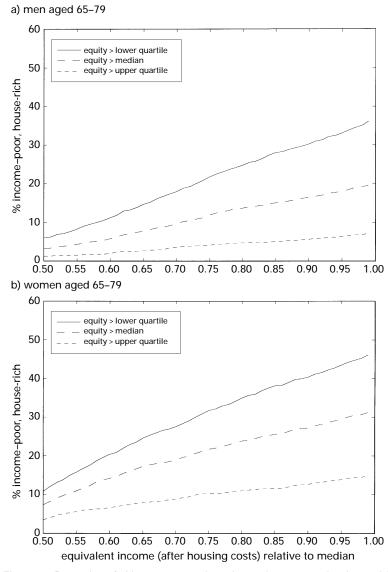


Figure 10. Proportion of older owner-occupiers who are income-poor but house-rich according to various thresholds, GB, 1992/3 and 1993/4 combined; by gender.

they tend to outlive their husbands. It is not surprising therefore that the proportions of older female home-owners who could be classed as income-poor but house-rich are somewhat higher than for men (Figures 10 and 11). For example, just under 10 per cent of male owner-occupiers aged 65–79 have incomes below 70 per cent of the

a) men aged 80 and over

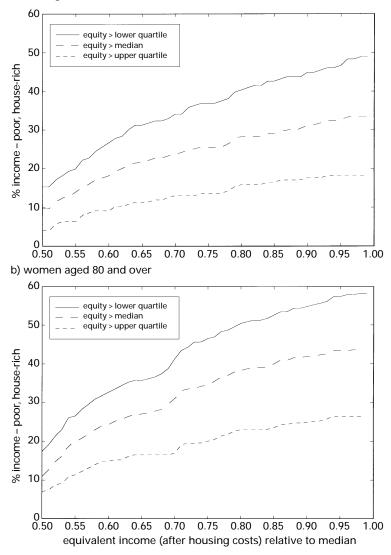


Figure 11. Proportion of older owner-occupiers who are income-poor but house-rich according to various thresholds, GB, 1992/3 and 1993/4 combined; by gender.

median and housing equity above the median level. For women who are owner-occupiers in the same age group, the corresponding percentage is just under 20 per cent. The sample sizes get rather small when we distinguish men and women in the 80 and over age group (178 and 234 respectively) but a similar picture is apparent. Comparisons

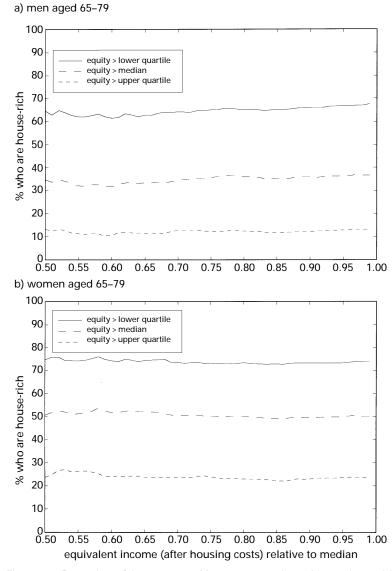
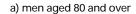


Figure 12. Proportion of income-poor older owner-occupiers who are house-rich according to various thresholds, GB, 1992/3 and 1993/4 combined; by gender.

for owner-occupiers aged 80 and over suggest a gap of nearly ten percentage points between men and women at a poverty line of 70 per cent of the median and a housing equity threshold at the median.

Figures 12 and 13 graph the proportion of income-poor older men and women who are house-rich. Here we can see that the proportions



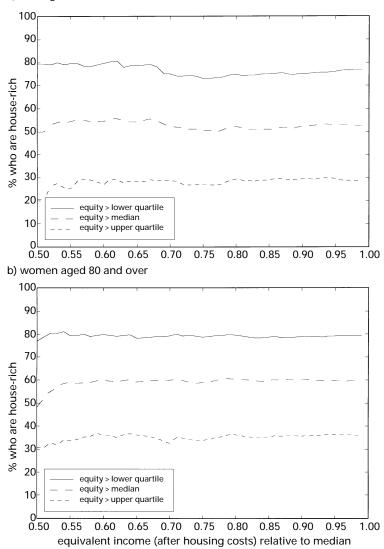


Figure 13. Proportion of income-poor older owner-occupiers who are house-rich according to various thresholds, GB, 1992/3 and 1993/4 combined; by gender.

of income-poor women aged 65–79 who are house-rich are consistently higher than the corresponding proportions for men. Among those aged 80 and over the differences are slightly less marked, although still evident. Since married women tend to outlive their husbands, they are less likely than men to have a spouse who can help care for them in old age and so more likely to need to pay for formal care services. Not only, therefore, are older women more likely than men to be income-poor but house-rich, they may also face greater care costs. Thus we confirm the findings of previous research that the potential for equity release schemes to supplement low incomes is of special significance for older women.

Concluding remarks

Among today's older population, owner-occupation rates, and the levels of equity tied up in their homes, both show a tendency to rise as income levels rise. On average, it is those on higher incomes who have the highest levels of housing wealth tied up in their homes. In this respect the potential benefits to be derived from the asset value of home-ownership appear to be greatest for those older people on higher income levels and it would be wrong to think that home-ownership alone can solve the problems of income poverty in old age either now or in the near future.

However, the proportions of older people who are estimated to be income-poor but house-rich, while small, are not negligible. In addition, at low levels of income the relationship between housing equity and income seems to be rather flat so that for quite a wide range of poverty thresholds, the proportions of older people who have given levels of housing equity are similar.

It is in the oldest age group, where women considerably outnumber men, that the highest proportion of income-poor, house-rich owneroccupiers are currently found. In part this reflects the greater proportion of this age group who are income-poor, which is to some extent a cohort effect. Fewer of this age group built up good occupational pensions during their working lives, for example. It is also a reminder that in the age range 65–79 a fair proportion of homeowners have not yet paid off their mortgage. Furthermore it has been projected that the proportion of older home-owners who still have a mortgage will be higher in the future than it is now (Holmans and Frosztega 1994).

The analysis presented in this paper suggests that there may be considerable proportions – although not necessarily a majority – of poorer older people, especially among the oldest age groups and especially among the oldest single women, who could convert the equity tied up in their homes into a useful supplement to weekly incomes. However, as others have concluded, for most, the amount

yielded would not make a major contribution to the costs of long-term residential care should it be needed for any length of time. It seems, therefore, that the potential value of equity release for older home owners lies not so much in contributing to the relatively large costs of long-term residential care as in providing a small supplement to income for everyday living expenses, or perhaps helping to meet the costs of home repairs and maintenance, or even to help with charges for domiciliary care. An important issue which arises is how any capital released and income generated by equity release are treated in the social security benefit system, and by local authorities when assessing charges for community care services. Currently, income from equity release is taken into account in full in assessing entitlement to meanstested benefits (for home-owners, both Income Support and Council Tax Benefit are relevant), so that it is possible that older owneroccupiers whose income and capital are sufficiently low for them to qualify for means-tested social security benefits would gain little from a home income plan since the income it generates may simply replace these benefits. If the capital is not used to generate an income stream, it would also reduce entitlement to means-tested benefits if it were greater than $f_{3,000}$; and if more than $f_{3,000}$ ($f_{16,000}$ if living in residential care) it would eliminate entitlement altogether. This could be a substantial barrier for older people wishing to exploit the asset value of their homes. In the future we may see less of a distinction between the older and younger pensioners, in terms of their incomes. On the other hand, the general spread of owner-occupation down the income distribution may result in more older people being income-poor but house-rich in the future. Appropriate mechanisms for drawing on housing equity in later life must therefore remain on the policy agenda.

Acknowledgements

This paper arises from a research project on the benefits and burdens of owneroccupation in old age which is supported by the Joseph Rowntree Foundation as part of its programme of research and innovative development projects which it hopes will be of value to policy makers and practitioners. The research team comprises Ruth Hancock, Janet Askham, Helen Nelson and Anthea Tinker. I have benefited greatly from working with my colleagues, and from their advice and comments on earlier versions of this paper. I have also had valuable discussions with Chris Hamnett. Other members of the Project Advisory Group have all given extremely helpful advice. Thanks are also due to Steve Pudney for access to his Gauss programmes for kernel density estimation and non-parametric regression, and to two anonymous referees for helpful comments. Material from the Family Expenditure Survey made available by the Office for National Statistics and the Data Archive is crown copyright and has been used with permission. All responsibility for analyses and interpretation rests with me.

NOTES

- ¹ Since April 1993 Britain's system of local taxation has been the Council Tax, for which each household was placed in a band according to the estimated value of its home in April 1991.
- 2 By definition this is (broadly) the person, or one of the people, responsible for the mortgage, rent etc.
- 3 Note, however, that if the income stream is generated by an equity release scheme involving the purchase of an annuity, the annuity rate will decrease with the life expectancy (increase with age) of the single person or with the life expectancy of the survivor in the case of a couple. Among the older population single people tend to be older than couples, so that the nominal income stream generated by a given level of equity is likely to be lower, on average, for couples than for single people.
- 4 Housing expenditure includes expenditure on repairs and maintenance as well as rent, mortgage and council tax payments. Households may, of course, spend less or more on repairs than is needed to maintain the value of their homes.
- 5 Recorded income is inflated to 1994 prices using the monthly all-items Retail Price Index, according to the month of interview.
- 6 Note that sample sizes in this oldest age group are small and this proportion is therefore subject to considerable sampling error. A similar analysis of the 1993/4 and 1994/5 General Household Survey, which has a slightly larger sample size, yielded lower estimates of the proportions of men and women aged 85 and over who were non-householders (6 per cent and 15 per cent respectively) but the marked upturn at this age was in clear evidence.
- 7 Kernel density estimates may be thought of as a form of smoothed histogram. See Silverman (1986) for full explanations of kernel density estimation techniques. Cowell *et al.* (1996) also provides a good exposition in an application using FES income data.

References

- Atkinson, A. B. and Harrison, A. J. 1978. Distribution of Personal Wealth in Britain. Cambridge University Press, Cambridge.
- Atkinson, A. B. and Micklewright, J. 1983. On the reliability of income data in the Family Expenditure Survey 1970–1977. *Journal of the Royal Statistical Society*, 146, 33–61.
- Banks, J., Dilnot, A. and Low, H. 1994. *The Distribution of Wealth in the UK*. Institute for Fiscal Studies. Commentary 45, London.
- Bull, J. and Poole, L. 1989. Not Rich: Not Poor. A Study of Housing Options for Elderly People on Middle Incomes. SHAC/Anchor Housing Trust, Oxford.
- Cowell, F. A., Jenkins, S. P. and Litchfield, J. 1996. The changing shape of the UK income distribution: kernel density estimates. In J. Hills (ed), New Inequalities: the Changing Distribution of Income and Wealth in the United Kingdom. Cambridge University Press, Cambridge, 49–75.
- Davey, J. A. 1996. *Equity Release: An Option for Older Home Owners*. Centre for Housing Policy, University of York. Research Report, York.

- Evans, M. 1995. Out for the Count: the Incomes of the non-Household Population and the Effect of their Exclusion from National Income Profiles. STICERD/LSE. Discussion Paper WSP/111, London.
- Forrest, R., Leather, P. and Pantazis, C. 1997. Home Ownership in Old Age: the Future of Owner-occupation in an Ageing Society. Anchor Trust, Oxford.
- Gardiner, K., Hills, J., Lechene, V. and Sutherland, H. 1995. *The Effects of Differences in Housing and Health Care Systems on International Comparisons of Income Distribution.* STICERD/LSE. Discussion Paper WSP/110, London.
- Gibbs, I. and Oldman, C. 1993. *Housing Wealth in Later Life: A Mixed Blessing?* Centre for Housing Studies, University of York. Discussion Paper 5, York.
- Ginn, J. and Arber, S. 1994. Heading for hardship: how the British pension system has failed women. In Baldwin, S. and Falkingham, J. (eds), *Social Security and Social Change: New Challenges to the Beveridge Model.* Harvester Wheatsheaf, Hemel Hempstead.
- Goodman, A. and Webb, S. 1994. For Richer, For Poorer: the Changing Distribution of Income in the United Kingdom, 1961–1991. Institute for Fiscal Studies. IFS commentary 42, London.
- Hamnett, C. 1990. A nation of inheritors? Housing inheritance, wealth and inequality in Britain. *Journal of Social Policy* **20**, 4, 509–536.
- Hamnett, C. and Seavers, J. 1996. Home-ownership, housing wealth and wealth distribution. In Hills, J. (ed), New Inequalities: the Changing Distribution of Income and Wealth in the United Kingdom. Cambridge University Press, Cambridge, 348–373.
- Hancock, R. 1995. Income and Wealth of Pensioners: an Analysis Conducted for the Joseph Rowntree Housing Trust. Age Concern Institute of Gerontology, London.
- Hancock, R. and Weir, P. 1994. More Ways than Means: A Guide to Pensioners' Incomes in Great Britain in the 1980s. Age Concern Institute of Gerontology, King's College London, London.
- Hills, J. 1991. Hedonic Price Indices for Housing Derived from the 1988 5 per cent Survey of Building Society Mortgages. STICERD/LSE. Research Note WSP/21, London.
- Hinton, C. 1996. Using Your Home As Capital 1996-97. Age Concern England, London.
- Holmans, A. 1990. *House Price Changes through Time*. Government Economic Service. Working Paper 110, London.
- Holmans, A. E. and Frosztega, M. 1994. *House Property and Inheritance in the UK*. HMSO, London.
- Holmans, A. E. and Frosztega, M. 1996. *Negative Equity: Information from Household Interview Surveys*. Department of the Environment. DoE Occasional Paper (Housing and Urban Monitoring Analysis), London.
- Jacobs, B. 1996. The national potential of home equity. *The Gerontologist* **26**, 5, 496–504. Johnson, P. and Webb, S. 1992. The treatment of housing in official low income
- statistics. Journal of the Royal Statistical Society, series A 155, 273–290.
- Johnson, P., Disney, R. and Stears, G. 1996. Pensions: 2000 and beyond Volume 2: Analysis of Trends and Options. Retirement Income Inquiry, London.
- Laing and Buisson Ltd. 1996. Care of Elderly People: Market Survey. Laing and Buisson Ltd., London.
- Leather, P. 1990. The potential and implications of housing equity release in old age. *Housing Studies*, **5**, 1, 3–13.
- Leather, P. and Wheeler, R. 1988. *Making Use of Home Equity in Old Age*. Building Societies Association, London.
- Mullings, B. and Hamnett, C. 1992. Equity release schemes and equity extraction by elderly households in Britain. *Ageing and Society*, **12**, 413-442.
- OPCS 1993. Great Britain 1991 Census: Communal Establishments. HMSO, London.

- Pahl, J. 1990. Household spending, personal spending and the control of money in marriage. *Sociology*, **24**, 1, 119–138.
- Pudney, S. 1993. Income and wealth inequality and the life-cycle: a non-parametric analysis for China. *Journal of Applied Econometrics*, **8**, 249–276.
- Redmond, G. and Wilson, M. 1995. Validating Polimod Output. Microsimulation Unit, Department of Applied Economics, University of Cambridge. Research Note MU/RN/14, Cambridge.

Silverman, B. W. 1986. Density Estimation for Statistics and Data Analysis. Chapman and Hall, London.

Terry, R. 1997. Equity Release Schemes: their Relevance for Housing Associations and Home Improvement Agencies. Metropolitan Home Ownership, London.

Venti, S. F. and Wise, D. A. 1991. Aging and the income value of housing wealth. *Journal of Public Economics*, **44**, 371–397.

Accepted 24 June 1997

Address for correspondence:

Age Concern Institute of Gerontology, King's College London, Cornwall House, Waterloo Road, London SE1 8WA, UK