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# Property-based welfare and European homeowners: how would housing perform as a pension?

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**Abstract** Notwithstanding current market volatility, there has been exceptional expansion in owner-occupied housing sectors and increases in house prices across European countries in recent decades. In the EU, individual wealth held in housing equity, especially among older people, has been considered a substantial reserve that could be tapped into to meet future pension needs as the ageing of the population becomes a greater stress on European welfare states. This paper seeks to take the notion of 'property-based welfare' further by examining, in principle at least, how home ownership may function as a pension across EU states. This firstly involves very approximate estimates of the types of, and rates of, income homeowners could hypothetically generate from their homes, including forms of income in kind. Secondly, criteria are identified to estimate how 'adequate' such potential incomes are in relation to working incomes and in bringing retired households above poverty levels. Thirdly, different circumstances across EU member states with regard to existing housing and pension arrangements are examined. Broad national groupings appear evident, with housing income having least impact in older member states in central and northern Europe. The paper concludes that while the potential outcome of housing wealth is country specific, in many cases, greater dependency on home ownership in welfare provision, particularly if it is used as a substitute rather than a complement to existing arrangements, may have adverse consequences for many.

Keywords Europe · Home-owners · Housing wealth · Pensions · Welfare

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# 1 Introduction

Home ownership across Europe constitutes an economic asset of considerable proportion. Notwithstanding recent economic developments that have (re-) emphasised the riskiness of housing as an investment, the total net value or equity of home-owned properties, that is, the gross value less outstanding loans, by the mid-2000s may have reached around  $\in$ 13 trillion in the older member states (EU15), and almost  $\in 2$  trillion among the new member states joining in 2004 (EU10; Doling and Ford 2007). Over these 25 member states, housing equity was some 40 per cent higher than total GDP, but was particularly large in the newer member states.<sup>1</sup> Not only are the amounts large, but they appear significant in relation to other sources of wealth. For example, a number of studies using data for the late-1990s and early-2000s indicate that in France, Germany, Italy and the UK housing wealth amounted to between a third and a half of total personal wealth (OECD 2000; Boone and Girouard 2002). Particularly high levels of housing wealth are even more typical among older European homeowners. Studies of households with a head aged over 55 years carried out in nine of the older member states have demonstrated that personal wealth held in housing equity is much higher than average, and in the southern member states of Greece, Italy and Spain accounts for over 80 per cent of personal wealth (Lefebure et al. 2006).

The point of emphasising the wealth built up in owner-occupied housing is that, in the light of ageing and aged European populations and growing pressures on the resources of traditional pension funds and annuities, the housing wealth of homeowners constitutes, if only theoretically in many cases, a potential reserve, supplement or even alternative to pension income. Such an assertion is not apolitical and implies a particular shift of responsibly for large aspects of social insurance away from more collective mechanisms and onto individuals, and is also likely to enhance the impact of existing inequalities in the distribution of wealth.

This paper starts from an, as yet, unrealised, and at least in the short term probably unrealisable, proposition that homeowners across all the member states of the European Union are able to access, routinely and fully, their housing wealth. This is not intended to suggest that homeowners could or should access housing wealth, but simply takes the notion of 'property-based welfare', discussed in the introduction to this special edition (see also Doling and Ronald 2008; Sherraden 2003), to one of its logical conclusions: that home ownership systematically contributes to the welfare needs of Europeans, especially their pension needs. Castles' (1998) assertion has been that high rates of home ownership in some countries may offset pension demands. This builds on Kemeny's (1992) observation that home ownership provides a means to redistribute income over the life course, with younger homeowners paying large portions of their income in early life over to support housing purchase, but enjoying minimal housing costs in later life once mortgage debts have been paid off. While Castles has forwarded evidence to suggest a relationship between welfare systems and housing tenure, our concern here is how houses may actually function as pensions. The purpose and scope of this paper, then, is an examination of the hypothetical potential of home ownership as a pension and in particular how it could be expected to perform in the European context.

<sup>&</sup>lt;sup>1</sup> This paper focuses on the EU 25 member states and not the new members who joined in 2007, Bulgaria and Romania, who are unevenly included in current data. Nonetheless, these countries have exceptionally high home ownership rates and have recently experienced rapid house price inflation, implying an even more exaggerated distribution of wealth in the owner-occupied housing stock.

This examination is pursued through three sequential steps, each of which constitutes a section of the paper. The first explores the nature and level of the income available, by virtue of their tenure position, to homeowners in each of the 25 member states. The estimates are based on a recognition that homeowners potentially derive an income in kind from the flow of housing services they enjoy as outright owners, as well as an income in cash, deriving from the release of the equity in their home. It should be emphasised from the outset that the estimates derived in the paper are, being based on some fairly sweeping assumptions, rather crude; nevertheless, they appear to provide an acceptable basis for the general evaluation pursued.

The second step consists of identifying appropriate criteria against which the estimates of housing income can be assessed. These are taken from what is now fairly well established in policy documents as a critical requirement of pension systems, namely that they provide citizens with 'adequate' levels of income in terms of both raising them above national poverty levels and reflecting their income during their working lives. Whereas these two aspects of the adequacy criterion are generally used to assess pension systems in their totality, by which is meant the particular combination of state provision, occupational pensions and various forms of private savings in each country, they are used here to examine how home ownership, as one part of national pension systems, contributes to the whole.

The third step of the paper further recognises the different circumstances prevailing across the member states with respect to both their existing housing and pension arrangements, as part of their wider social welfare systems. The point is that these differences influence how the income derivable from housing measures up to the adequacy criteria, and together suggest three groupings among European countries. Broadly, the contribution of housing income to the adequacy criteria appears less in the older member states in central and northern Europe than in other member states. A significant caveat in understanding the relative impact of these differences concerns variations in cultural practices and local institutional arrangements which make accessing the wealth represented by housing assets more or less viable in each context.

In the final section of the paper we draw some general conclusions about the applicability of the analysis to policy debates, emphasising not only that the potential impact is member state specific, but is also dependent on the extent to which housing income is seen as a substitute or complement to existing arrangements.

## 2 Estimating housing income

## 2.1 Principles

Housing constitutes a complex good that may serve identity needs as a symbolic good; provide a flow of services such as shelter, warmth and comfort, private family space etc., as a use good; as well as constitute an investment good in terms of a store of current asset value and potential capital gains (Ronald 2008). The latter feature has become increasingly salient in understanding housing objects, especially as in recent decades intensified commodification has emphasised the monetary value and market exchangeability of homes. Moreover, the function and exchangeability of homes as commodities has been particularly advanced by innovations in housing market derivatives and equity release products that have challenged more simplistic conceptions of housing wealth. Following on from this, the nature of the income that is embedded in, and thus may be derived from, housing

reflects the fact that housing is unusual, though not unique, in being both an investment and a consumption good that consequently offers the owner two sources of income: income in cash and income in kind.

An 'income in cash' lies in the capital value or equity of the dwelling. Insofar as dwellings are tradable commodities each will have a market price that represents the valuation as a capital asset. People who acquire the ownership of a dwelling thus have a store of wealth, the value of which may increase or decrease over time, and, like other stores of wealth, provide opportunities to realise the value in the form of cash. These opportunities cannot always be easily taken up, hence the use of the phrase "income *embedded* in housing". Nevertheless, they might be achieved by selling the house and moving to a cheaper house, that is, releasing some of the equity, or moving into a rented property, thereby releasing all the equity. An alternative may be to remain in the home while using a financial product such as a reverse mortgage or equity release loan to achieve a cash income.

An 'income in kind' represents the flow of services derived from the size and quality of the dwelling and its location. Dwellings that are larger, have more expensive and desirable facilities, and are in locations with good access to desirable land uses will tend to attract higher market prices than small, poorly equipped dwellings in unattractive locations. This market price can be thought of as proportional to the rent that the dwelling would attract. Owner-occupiers, who of course do not literally pay rent to themselves, nevertheless may be considered to receive a flow of services with a value equivalent to the rent that the dwelling would attract, were it on offer in the market, which may be considered an 'income in kind'.

# 2.2 Definitions

The *income in cash* embedded in a home is thus based on its market or capital value. A house, whether it is sold to another homeowner or acts as the basis of a financial product, would provide the owner with either an income directly or a lump sum, which could be converted through an annuity into an income. The amount of the income would be reduced as a result of any outstanding loans taken out in order to purchase the home. In other words, the net capital value and net income in cash would reflect the current proportion of the equity held by the owner. Since the normal pattern is for housing loans to be repaid by the age of retirement, however, so that older homeowners are typically outright owners (see Disney and Johnson 2001), for the present exercise a simplifying, and not greatly unrealistic assumption, is that the relevant amount is related to the full market value of the home.

Here, the income in cash is calculated by using an arbitrary value of five per cent of net equity. This is not strictly how the value of a reverse mortgage or other equity release financial product would be calculated, because these are likely, since it will influence the length of time before repayment will be made, to factor in the present age of the owner. Simply, the older the homeowner and the shorter their life expectancy, the greater the income that could be generated by a given amount of capital. However, given a product taken out at an age of 60 or 65 years and a life expectancy in many member states of maybe 20 years beyond this, for the purpose of calculating what sum might be generated by the value of the dwelling, five per cent is taken as an approximation.

The measurement of the *income in kind*, or imputed rent, representing the flow of services from a house, needs to recognise the consequence of the costs incurred in consuming the house. Thus, the amount of the net income from a home will be affected by

taxation arrangements so that, for example, in countries where tax is incurred on the notional or imputed income derived from their home, the net income will be reduced. The importance of tax arrangements may be considerable (see Haffner 2003) but in the absence of information about them, harmonised over all the EU member states, here the simplifying assumption is made that their impact is negligible. Rather, it is assumed that the greatest reduction of the occupier's income in kind received from housing will be the cost of loan repayments. Thus, it can be expected that in countries in which there are developed mortgage markets and total housing debt is equivalent to a high proportion of GDP, total housing income in kind would be considerably offset. But, the assumption that the target group here, that is those owners over retirement age, will have paid off all or at least most of their housing loans again allows a simplification of the estimating procedure.

Several different methods of calculating imputed rent can be identified (Frick and Grabka 2002), including the Market Value Approach, which is based on the level of real rents paid for comparable properties less any part of those rents that might be related to heating or utilities, and the Capital Market Approach, which takes the market value of the home arguing that the imputed rent should be defined as a rate of return on the value of the investment. Whichever approach is adopted, there are specific issues to be addressed. With the Market Value method there may be problems of identifying market values for comparable properties, for example in countries where the rental market is small, subject to rent control, or where the rental and home ownership dwellings tend to be different, perhaps the former being single-family dwellings and the latter apartments, for example. With the Capital Value method the decisions about the appropriate rate of return may have a considerable, systematic effect on size of the estimates.

Here, the latter is adopted and for the purposes of providing an indication of how home ownership would contribute to retirement income across European states, estimates of the net income in kind in each member state have been derived by multiplying the average market price of a home-owned dwelling by a rate of return of four per cent. This particular value has been taken as an approximation based on the arguments reported by Frick and Grabka (2002) that a return of inflation plus two per cent represents a reasonably safe investment and on the generally low levels of inflation through most of the EU in 2003, this being the time base for the present exercise. Additionally, a figure of four per cent recognises that owners face continuing costs of repairs and maintenance necessary in order to maintain the capital value of their home and that there may be specific taxes for example on imputed rental value. Insofar as there is variation of rates of inflation, repairs and maintenance costs and tax liabilities across member states, the use of a single figure of four per cent will necessarily lead to over-estimates for some countries and under-estimates for others, an outcome which is acceptable given the aim of producing measures that are indicative.

# 2.3 Data

Given that estimates of both income in cash and income in kind may be derived from capital values multiplied by appropriate rates of return, what data may be used? In principle, there are two main types: micro, or household level, and macro, or national aggregate level. An advantage of the former is that it can provide more information about within-country variations and correlations with other household level variables such as former and current incomes. Micro-level data thus give a rich, detailed picture of the situation in each member state. In practice, however, availability is limited and there are no micro-data sets covering all the EU25 that contain information about the capital value or the accumulated equity

(capital value less outstanding loan) of the homes of homeowners. It is true that the SHARE data set usefully covers older households with information on their assets, including housing—albeit some of which are based on self-evaluation rather than objective values—but it covers only some of the older member states (Lefebure et al. 2006).

In these circumstances, our estimates use macro data. Actually, even with macro data, the absence for some countries of some key variables, such as average prices, necessitates the use of approximations. Nevertheless, the approach does allow results for all the EU25 member states. Since the data are broadly comparable they provide pictures of the potential contribution of housing to income in old age in a form that allows some general conclusions about both its effectiveness overall and differences between countries.

#### 2.4 The estimates of housing income

Our calculations, then, start from the average value of home ownership homes in each country at about 2003. A fuller description of the methodology and data sources is given in Doling and Ronald (2008), but here we note that data on average house prices are not consistently available across all member states. Our procedure has consisted of the collation of estimates from different sources together with approximations for some countries. One consequence may be that the measures of housing income reported in Table 1 are over- or under-estimates for some countries, so that caution in the drawing of conclusions is particularly necessary. Caution is in any case appropriate since these estimates in each member state rest on an assumption that the price-distribution of national stocks of owner-occupied housing is similar to that between younger and older owners, even though there is evidence that older Europeans tend to have particularly large amounts of housing wealth (see Lefebure et al. 2006).

The general point here is that there are potentially large, and unknown, margins of error in our estimates so that there is little foundation for treating them as reliable and precise. They are offered as indicators which may be useful to an understanding of home ownership as asset-based welfare only because at the present time there are no other quantitative measures available and, as the analysis below demonstrates, these estimates do seem to be broadly consistent with other relevant analyses of national housing and welfare systems.

Because the estimates of the two types of income embedded in housing are both derived by multiplying the average capital value by a rate of return, the data in columns (2) and (3) of Table 1 differ systematically, with the income derived from the equity (income in cash) being at a ratio of 5–4 to the income derived from imputed rent (income in kind). In order to facilitate comparison across member states, the estimates of income are expressed as a proportion of GDP per household. Again, there is no differentiation here between younger and older households, and GDP is not in any case exactly the same as household income. Nevertheless, it may appropriately be thought of as a measure of the average consumption and, as such, it provides a common yardstick against which to assess the contribution of the income derived from housing towards the income of older people.

An important feature of the estimates is the correlation between the relative size of the home ownership sector (column 1) and the total housing income as a percentage of GDP per household (column 4). While for the newer member states the correlation is low (r = 0.052), among the older member states it is significant (r = 0.456), indicating a general tendency in the latter such that larger amounts of home ownership are associated with higher house prices, relative to GDP. Homeowners in older member states with lots of homeowners, in other words, will tend potentially to enjoy higher average housing incomes. Without pursuing the matter of cause and effect, one tentative conclusion—although clearly

	1	6		
	Home ownership rate (%) (1)	Average income in cash as % of GDP per household (2)	Average income in kind as % of GDP per household (3)	Average total housing income as % of GDP per household (4)
Austria	58	11.7	9.3	21.0
Belgium	68	7.9	6.3	14.2
Denmark	53	10.7	8.5	19.2
Finland	63	9.9	7.9	17.8
France	56	13.6	10.9	24.5
Germany	45	10.4	8.4	18.8
Greece	74	28.3	22.6	50.9
Ireland	77	14.8	11.9	26.7
Italy	80	11.7	9.4	21.1
Luxembourg	67	5.9	4.8	10.7
Netherlands	55	15.3	12.2	27.5
Portugal	75	30.9	24.7	55.6
Spain	82	21.5	17.2	38.8
Sweden	46	12.5	10.0	22.5
UK	69	17.8	14.2	32.0
Cyprus	68	11.4	9.2	20.6
Czech Republic	47	22.4	17.9	40.3
Estonia	85	16.9	13.5	30.4
Hungary	92	18.3	14.6	32.9
Latvia	79	4.8	3.9	8.7
Lithuania	91	35.3	28.3	63.6
Malta	70	13.1	10.5	23.6
Poland	58	30.4	24.3	54.8
Slovakia	74	34.1	27.3	61.4
Slovenia	84	32.1	25.7	57.8

Table 1 Home ownership rates and housing income

Source: (1) Boverket (2005), Catte et al. (2004); (2)-(4) authors' calculations

it applies only to the older member states—is that the potential of home ownership to meet the income needs of older people will be greater in countries with lots of homeowners, in the first place because literally there will be more that could benefit and fewer, non-owners, who would not, but, in the second place, also because the amount they could benefit by would be larger relative to their overall income as measured by GDP. A conclusion from this is that the potential of home ownership as a contribution to income in old age will be greater in those older member states with high home ownership rates, and less in those with lower rates.

# 3 The adequacy criteria

Once the amount of these two sources of housing income available to European homeowners is estimated, the second stage of examining how home ownership may function as a pension consists of identifying appropriate criteria against which they can be assessed. From a range of sources, including those related to the EU (European Commission 2006), the World Bank (Holzman and Hinz 2005) and the OECD (Disney and Johnson 2001), it is possible to identify the primary goal of pension systems as being adequacy in the sense of both protecting European citizens from the risk of poverty and maintaining their preretirement standard of living. These sources identify other criteria, emphasising the requirement that pension systems should also be sustainable and affordable, but these are not considered in the present paper. Here, the aim is only to assess the extent to which the use of the income that might be derived from housing would contribute to the raising of living standards of households that might otherwise be below the poverty line and to levels closer to those enjoyed before retirement.

Building on from the tentative conclusion from the previous section of the paper, and given that columns 2, 3 and 4 provide broad estimates of the amount of income embedded in the homes of European homeowners, how do they match up to the two adequacy criteria?

## 3.1 Maintaining living standards

On the face of it, the estimates of imputed rent in column 3 indicate that the person who at the point of their retirement is an outright owner of the home they occupy is able to go on living in that home, and in that way their standard of living—or at least its housing element—is maintained. This is consistent with the Castles thesis that home ownership is a means of distribution over the life cycle, and that by the time they reach retirement age homeowners are typically outright owners and can consequently, in his words, "get by on a smaller pension" (Castles 1998). Column 3 provides measures of the relative scale of the contribution to the average household in each member state, and correspondingly its contribution to pension needs. In some—Luxembourg and Latvia, notably—this appears relatively modest at under five per cent, while in others, Portugal of the older member states, and Lithuania, Poland, Slovakia and Slovenia of the newer ones, it may be around 25 per cent. Indeed, as part of what will emerge in our analysis as a recurring picture, the relative contribution of housing income is particularly significant in the newer rather than the older member states.

Set against the contribution of an income in kind of an amount described in column 3, it should be noted that the outright owner is not necessarily in a better position relative to a tenant. In those housing systems in European countries which have large rental sectors with rents based on historic costs, broadly what Kemeny (1995) refers to as unitary systems, and even more so where tenants have security of tenure and a system of means-tested housing allowances is in place, and particularly if for those on very low incomes all their rent is met by housing allowance, tenants may also enjoy the capacity to maintain their standard of living. So, however, large the housing income in kind enjoyed by older homeowners, it is not necessarily the case that it contributes anything to their income that they would not also gain had they chosen to rent their home.

In contrast, when we turn to the housing income that owners could, given accessibility to appropriate equity release products, derive from the equity in their home they have a clear advantage over renters. Column 2 of Table 1 indicates that this might contribute amounts from just under 5 to almost 30% of an average household's share of GDP. When these amounts are set against the shortfall in the incomes as between older and younger Europeans, as indicated in column 1 of Table 2, while they cannot literally be summed, they would seem to indicate a considerable reduction in the drop-off in income that the

	Relative median equivalent income of age 65< compared to 64> (%) (1)	Proportion of income derived from pension (%) (2)	Poverty rate (%) 65+ years (3)	Poverty rate (%) 0–64 years (4)
Austria	93	79	17	12
Belgium	76	84	21	14
Denmark	71	76	17	10
Finland	75	82	17	10
France	90	91	16	13
Germany	88	-	16	15
Greece	78	71	28	18
Ireland	62	70	40	19
Italy	95	83	16	20
Luxembourg	101	77	6	12
Netherlands	84	74	7	13
Portugal	76	72	29	19
Spain	77	78	30	18
Sweden	77	83	14	11
UK	74	69	24	17
Cyprus	-	-	52	10
Czech Republic	83	78	4	9
Estonia	76	60	17	19
Hungary	87	75	10	12
Latvia	80	61	14	17
Lithuania	89	62	12	15
Malta	90	45	20	14
Poland	113	-	6	18
Slovakia	89	-	12	22
Slovenia	87	71	19	9

 Table 2
 Pension and income characteristics

Source: European commission (2006)

figures suggest occurs with retirement. Indeed, in those member states where, on average, older people enjoy incomes only slightly lower than younger people, the addition of income from housing equity might result in them actually being better off. This might be particularly the case in the newer member states where, with the exception of Estonia, the average older person has an income of at least four-fifths of that enjoyed by the average younger person. Our estimates suggest, then, that were older homeowners routinely to convert their housing equity into income, on average they would be able to consume at levels similar to if not greater than they did when younger.

Whereas the figures in Table 2 do not themselves distinguish between buyers and renters, the argument nevertheless remains that housing equity potentially contributes to both the non-housing as well as the housing elements of the standard of living of older homeowners. It may not of course provide support for older renters, and in a relative sense even make them worse off, but there seems little doubt that if older homeowners acquire the means of converting their housing equity into income, it would provide them with the

means of adding to, or supplementing, the income they get from other sources. In that sense, their ability to maintain living standards would clearly be enhanced.

## 3.2 Reducing the risk of poverty

Given, then, that on the basis of the macro statistical data presented here, income derived from housing has the potential to contribute to maintaining the standard of living of older people, how might it perform against the second of the adequacy criteria? One perspective on this is provided by the significant correlation between poverty rates among older people (Table 2 column 3) and home ownership rates (Table 1 column 1) so that, broadly, those older member states with the highest poverty rates also have the highest home ownership rates.

Specifically, the scatter plot (Fig. 1) suggests a group of countries, comprising the southern or Mediterranean states plus Ireland, and perhaps the UK, which have high rates of both old age poverty and home ownership. Such a division has also been found in an analysis of nine of the older member states which demonstrated that either housing income in cash or in kind, applied individually, had the greatest impact on reducing the incidence of poverty among older people in those states with most homeowners (Lefebure et al. 2006).

On one interpretation this appears consistent with the Castles thesis that the comparison of welfare systems *between* the Old World (western Europe) and the New World (Australia, New Zealand and Canada) needs to recognise that low levels of benefits through welfare



Fig. 1 Home ownership and poverty rates

systems in the latter have in practice been compensated for by high benefits through the ownership of housing (Castles 1998). Figure 1, covering the older member states, suggests that the comparison might also apply *within* the Old World: the greater poverty rates in some member states are compensated by higher rates of home ownership.

### 4 Housing-pension regimes

It should be clear from the analysis to this point that the assessment of housing as a pension is dependent not only on the amount of income derivable from housing, set against the adequacy criteria, but also on the specific circumstances of each member state. As illustrative of these, whereas the average home ownership rate across the 25 member states of the 2004 expansion was approximately two-thirds (Doling and Ford 2007), it was around mid-40% in Germany and Sweden but over 90% in Hungary. Likewise, the specific subsidy arrangements in each member state will determine the relative position of homeowners and renters and may give priority, or not, to the latter thus maximising, or partially negating, their housing income position. The specific circumstances also include the possible existence of a correlation in each member state between housing and non-housing equity, the use of the latter would contribute to a narrowing of the income distribution and a reduction in the risk of poverty. In contrast, where those with most housing equity are the richest households anyway, the contribution of housing income would tend to widen income inequalities.

Equally, there is a wide diversity in pension systems, for example with respect to the balance between state and private provision and between insurance and redistributive objectives (Whitehouse 2007). Moreover, in addition to the variation evident across the pre-2004 member states (EU15) new hybrids have been developing from the pre-communist as well as communist histories of some of the newer member states (Schmahl and Horstmann 2002). So, whereas in nine of 14 of the EU15 for which data are available, the state contributes over 10 per cent of GDP to pensions, this is so in only three of the EU 10; and whereas Italy contributes 14.2 per cent and Austria 13.4 per cent, Ireland contributes 4.7 per cent and the UK 6.6 per cent (European Commission 2006).

Using the data presented in Tables 1 and 2, and building on the country groupings suggested by Fig. 1, it is possible to identify three broad groupings of member states each with a distinctive nexus of housing and pensions: older member states with high home ownership rates and high inequality; older member states with low home ownership rates and low inequality; and the newer member states with a combination of high home ownership and low inequality.

There is in this and other relationships emerging from our analysis a consistent indication of different housing-pension models within the member states. In more detail, there is one group of countries, which includes what are commonly referred to as "liberal" regimes—the UK and Ireland—and the southern member states of Portugal, Spain, Italy and Greece, all of which are characterised by relatively low levels of redistribution and social provision. As the group averages of Table 3 show older people in this group tend to have incomes that are substantially lower than younger people, being only 77 per cent of the average for those under 65, compared to 83.8 and 88.2%, respectively for the other two country groupings. Further, while state pensions do make a major contribution to their incomes, the risk of poverty in old age is the highest of the three groups, 27.8 per cent as opposed to 14.5 and 16.6%, respectively. An apparent compensation comes through large

	Home ownership (%)	Housing income as % GDP per household (%)	Relative median equivalent income of 65< compared to 65> (%)	Proportion of income derived from pension (%)	Poverty rate 65+ years (%)
Southern and western	76.1	37.5	77.0	73.8	27.8
Central and northern	56.8	19.6	83.8	80.7	14.5
Newer	74.8	39.4	88.2	64.6	16.6

 Table 3
 Averages for three clusters of member states

home ownership sectors with high levels of housing income, so that for large sectors of their population there is a significant addition to their income through imputed rent with further potential addition coming from their housing equity.

It should of course be recognised that there may be important differences within this first group of member states. For example, differences exist in institutional arrangements and cultural practices between liberal regimes and southern member states in terms of how housing assets may be turned into income. In the former, market transactions, downsizing and the use of equity release products are more likely to be used in realising housing goods and services may be more likely in the latter. But notwithstanding these differences, in terms of the macro statistical data presented here, they appear to share a fairly uniform mix of income distribution, pension generosity and housing income potential.

The second group of countries consists of the remainder of the older member states of central and northern Europe—Austria, Belgium, Denmark, France, Finland, Germany, Luxembourg, the Netherlands, Sweden—where social provision has generally been the more developed. In these countries, and in comparison with the other country groupings, state pension systems are generally the most generous and the orientation toward redistribution results in the lowest risk of old age poverty of the three groups. In these countries there is the least potential of housing income to make a contribution to the income of older people both because, proportionately, fewer of their households are owners but also because the average income that could be generated by their homes is lower. On the other hand, (though not itself shown in Table 3) they tend to have unitary rental systems which may possibly offer high levels of net housing income in kind.

The final group of countries consists of those member states that joined the EU in 2004 and which are often referred to as the newer member states. With the exception of Cyprus and Malta, they experienced a number of decades under communist systems and both their housing and pension systems are undergoing processes of transition. Actually even though their state pension systems do not make as large a contribution to the incomes of older people their incomes are large relative to those of younger people, and the risk of poverty is almost as low as it is in the second group of countries. Indeed, in a number of them the risk of old age poverty is actually lower than young age poverty (columns 3 and 4, Table 2). For older people in this group of countries, the potential contribution of housing income is broadly on a par with those in the first group. A notable feature in transition economies is very high home ownership rates among older people and the comparatively low level of net pension incomes. As in southern member states, family transfers and reduced housing costs in old age may be particularly significant in this context. Whereas this typology contributes to an understanding that the potential of home ownership as income contributing to the needs of older people in both maintaining their former standards of living and reducing the risk of poverty, it is also important to acknowledge that it is based on aggregate data and averages. In this respect, a switch from macro to micro data might, as a number of studies of smaller numbers of countries have suggested, indicate that home ownership and housing wealth reinforce rather than compensate for existing inequalities. The position across the member states is complex and does not uniformly conform to the model of those with the least cash income, be they old or young, having the most housing wealth (Ritakallio 2003; Fahey et al. 2004; Whiteford and Kennedy 1995). Among older people there is in some of the older member states a pattern of housing assets rising with higher income groups (Lefebure et al. 2006). Moreover, it is not even, as noted earlier, the case that the old are at higher risk of poverty than younger people: in ten of the EU25 older people are less likely to be in poverty.

These differences further indicate that the potential contribution of housing toward income in old age is likely to be different in different member states according to differences in both pension and housing systems, but also to the distribution within their populations of housing, pension and other assets. The stylised picture of older people being poor or at least at greater risk of poverty, perhaps because of pension provision that is at a low level relative to incomes from work, with housing wealth providing a compensating mechanism, is not necessarily helpful. Indeed, on the basis of the evidence available it seems probable that in at least some member states homeowners are generally likely to have higher incomes than non-owners. To that extent those with the highest cash incomes could also receive the highest income from housing, perhaps increasing rather than reducing income inequalities and not necessarily making any great reduction in the risk of poverty.

So, returning to the starting point of the paper, how would home ownership perform as a pension? The analysis has provided some evidence of how the income embedded in housing might perform in relation to the two dimensions of the adequacy criterion—maintaining living standards and reducing the risk of poverty. It suggests, however, that there is not a simple answer that applies uniformly across the member states. Housing income in kind may enable older homeowners to live rent free and thereby continue their former standard of housing, but the housing systems operating in some member states may provide renters with similar opportunities. On this criterion, however, it seems clear that homeowners in all member states on average, although to an extent that reflects variations in the housing equity owned by different individuals, would benefit from higher incomes.

These conclusions apart, the analysis has implicitly made an assumption about the continuation of existing pension systems. The conclusions would undoubtedly be affected by a further consideration: should the question of the performance of housing as a pension be based on the principle of housing as a complement to, or on the principle of housing as a substitute for, tax-funded pension systems. The use of housing assets to support the consumption needs of older households is, on the one hand, an option for households providing them with an opportunity to complement other forms of saving, including through state pensions. As such, the opportunities for a financially comfortable, high-consuming old age are considerably enhanced. In these circumstances housing wealth is a *complement* to other income. On the other hand, housing assets also present an option to governments wishing to find substitutes for pension and other public responsibilities for meeting the costs of old age. Encouraging households to rely less on the state by saving more, through housing and

other forms of investment, could seem an attractive way of combating the fiscal problems of funding existing state pension systems. In these circumstances housing wealth becomes a *substitute* for taxation.

For non-owners the possible effects are particularly complex. There might be no direct impact on them if housing wealth is accessed as a complement, but if it is used as a substitute, as part of a general reform of pension entitlements, the critical issue would be how their pension rights were affected. Even for owners as a group, it is clear that across the member states there is no evidence of a uniform, negative correlation between housing wealth, on the one hand, and existing pension entitlements or other personal wealth, on the other. In other words, it might reduce existing inequalities of wealth and income in some member states but reinforce it in others. In contrast, the use of housing wealth as a substitute for state pension entitlements favours those of working age whose tax bills should be lower than they would be if present pension systems continued.

The interest of European governments may seem consistent with an equity-based welfare philosophy, and the political attractions may seem compelling, but if they pursue a policy of weakening the social insurance principles of their pension systems—and certainly if it is weakened for non-owners also—the result would seem likely to be an increase in both inequality and the risk of poverty among older people. Overall, it may be argued that the capacity of housing wealth, as with all asset-based approaches, "to furnish social security in any universal way is highly dubious" (Esping-Andersen 1996, p. 26).

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