Home Ownership and Income Inequality
Trends in Western Europe

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WP 20

December 2011
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5 December 2011

Word count: 4907

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Introduction

Since the 1980s tenure patterns in Western Europe have changed radically. The social rented sector, which grew steadily in the decades following World War II and the private rented sectors have generally contracted and in most EU15 countries home ownership has expanded significantly. By 2007 home ownership accommodated more than 60 per cent of households in the vast majority of EU15 countries (Germany and Austria are the only exceptions) and in several (Italy, Spain, Finland) it was the overwhelmingly dominant tenure accommodating over 80 per cent of households. This development has inspired a substantial literature and due to the major impact which home ownership has on the distribution of wealth and welfare, many of these writings are concerned with examining the relationship between the growth of this tenure and social inequality.

Much of the early research on the expansion of home ownership is concerned with assessing the extent to which the socio-demographic composition of this tenure is shaped by wider structural inequality patterns. For instance access to home ownership is influenced by socio-demographic characteristics such as: age, income, class, and generation (Murie, 1983; Kurz & Blossfeld, 2004); labour market position, particularly: employment status and security (Horsewood & Neuteboom, 2006); ethnicity, citizenship and immigrant status: (Masnick, 2004; Lewin-Epstien et al, 2004); regional and urban/rural location (Groves et al, 2007; Fielding, 1992); and national context (Horsewood & Neuteboom, 2006). Kurz & Blossfeld’s (2004) review of ten European countries suggests that class and income impact more on the transition to home homeownership today than they did in the past therefore access to the tenure has generally become more difficult. Other authors, such as Harloe (1981, 1995) proffer a broader analysis of this issue which highlights the higher rates of home ownership
in more unequal countries with smaller ‘liberal’ welfare states, such as the United States and the United Kingdom, and links the growth of this tenure with the rolling back of public provision, particularly the withdrawal of government subsidies for housing provision.

More recently the role which home ownership plays in reinforcing existing structural inequalities has emerged as a major theme in the literature. The potential gains which individuals can generate from home ownership, compared to rented housing, include: savings and wealth accumulation; security for access to credit; an asset which could be liquidated to generate income; and a means of protection from contingencies especially in older age (Murie, 1983; Kurz & Blossfeld, 2004; Boelhouwer et al., 2004; Ronald, 2006). These gains may reinforce income, gender or age related inequalities. Some authors have argued that owner occupation also drives public policy reforms which reinforce inequality. In this vein Kemeny (1991, 1995) suggests that the lumpy nature of home purchase costs, which are concentrated largely in the expensive family formation stage of the life cycle, discourages younger voters from supporting the high taxes necessary to support generous public welfare provision. The role of home ownership in undermining public welfare provision is further evidenced by the ‘asset based welfare policies’ common in south east Asia for decades and adopted by the UK and US governments in recent years (Ronald, 2007: Groves et al, 2007) These policies are predicated on the expectation that housing assets can be drawn on to cover contingencies for which government support was traditionally available such as old age or unemployment.

An alternative thesis about the relationship between home ownership and inequality is proposed by Castles (1998). His analysis demonstrates that the distributions of income and home ownership do not match up perfectly largely because many retirees have low incomes
but are also home owners. In the countries where income inequality is highest, home ownership rates are highest among retirees in the lowest income decile. Thus Castles (1998:16) argues that “the inclusion of the benefits of home ownership as part of the income concept markedly reduces the gap between the average income of older people and the average income of the total population”. Therefore home ownership counterbalances the effects of income inequality between age cohorts within countries and because the rate of home ownership in OECD countries is inversely correlated with government revenues and expenditures, Castels’ (1998) analysis also implies that home ownership might also act as a form of private insurance which counterbalances inter-country differences in public welfare provision.

Despite the scale of this literature on home ownership and inequality, and the fact that the assumption of a strong relationship between the two underpins many of the most influential typologies used to compare and analyse housing systems in developed countries (Harloe 1981, 1995; Kemeny, 1995), the relationship between this tenure and inequality has not been robustly interrogated in comparative perspective. Most studies in this genre examine a single country or a small number of countries. Where comparative analysis has been attempted this often draws on national level data, which may not be fully comparable on a cross country basis (e.g. Kurz & Blossfeld, 2004). The small number of studies which employ comparative data are now rather dated (e.g. Horsewood & Doling, 2004; Horsewood & Neuteboom, 2006).

This paper aims to addresses this shortcoming by comparing trends in income inequality and home ownership inequality in western European countries over the last decade. To do this we employ data from the 2007 European Quality of Life Survey and the 1997 iteration of the
European Community Household Panel (ECHP) survey. The extent of macro-level income inequality in these countries is measured using the GINI-coefficient (the most commonly used measure of disparity of the overall income distribution) and this is compared to the proportion of households accommodated in the owner occupied sector in these countries in both 1997 and 2007. Gini scores range between a possible maximum of 100 (which refers to highest possible income inequality and would materialize if all the income were in the possession of a single person) and a minimum of 0 (which characterizes a society of absolute income equality where all individuals have the same income). Home ownership inequality is assessed with reference to three dimensions of this phenomenon which are most prominent in the literature: inequality in access to this tenure (Murie, 1983; Kurz & Blossfeld, 2004; Horsewood & Neuteboom, 2006; Masnick, 2004; Lewin-Epsten et al, 2004; Groves et al, 2007; Fielding, 1992); affordability of home ownership and in the associated risk of repossession (Horsewood & Doling, 2004; Ford, et al, 2001) and quality of dwellings (Dekker et al, 2007; Kurz & Blossfeld 2004; Schlottman & Boehm, 2008; Iwata & Yamaga, 2008; Elsinga & Hoekstra, 2005). To operationalise these we examine synchronic and diachronic cross national variations in home ownership access, affordability and dwelling quality among low income owner occupier households and compare these households to their high income national counterparts.
Methods, Data and Questions

As mentioned above, the analysis presented draws on data from two social surveys – the 1997 tranche of the European Community Household Panel (ECHP) and the 2007 European Quality of Life Survey (EQLS). The ECHP involved annual interviewing of a representative panel of households and individuals in EU member states from 1994-2001. It covered a wide range of topics including: income, health, education, housing, demographics and employment characteristics. The EQLS is a survey of households in the 27 EU member states, and the three current EU candidate countries, and Norway. Approximately 1,000 adults (aged 18 years and over) were interviewed in each country. However, larger samples were employed in France, Italy and the UK (1,500) and Germany (2,000). The sampling procedure was a multi-stage stratified random sample. Data was collected via face-face interviews. The questionnaire covers a range of topics relevant to quality of life and well-being, including a number of questions on housing. Most importantly, unlike most other pan European surveys, the ECHP and EQLS include a detailed question on housing tenure, which distinguishes outright home owners from mortgage holders and a range of other questions which enable us to examine the various dimensions of home ownership inequality.

The paper focuses on western European countries because the very high rates of home-ownership in the central and eastern European, former communist, EU members were driven primarily by the mass privatisation of formerly state owned dwellings in the early 1990s following the fall of communism, rather than the structural inequalities under examination here (Roberts, 2003). In addition, our analysis addresses the working age population (25-64 years) and excludes older households on the grounds that the housing situation of the latter
may will be influenced by their historic rather than current incomes and historic rather than contemporary public subsidies.

As mentioned above, the paper examines three dimensions of inequality in relation to home-ownership. Access to home-ownership is measured in terms of home-ownership rates and variations in access by income. Home-ownership affordability is assessed by the extent to which home owner households reported that housing costs were no burden at all and dwelling quality is measured using home owners’ own assessments of whether their dwelling has problems with: space; rot in windows, doors or floors; damp or leaks in walls or roof; lack of indoor flushing toilet; lack of bath or shower; and lack of place to sit outside (e.g. garden, balcony, terrace). The household was given a value of one for each problem it did not report having, which resulted in an index consisting of scores from 0 (poorest quality) to 6 (highest quality). Given the very high level of housing quality in the countries under investigation, our analysis focuses on those with the highest quality housing (households with a score of 6).

The purpose of this analysis is to shed light on a number of questions about the relationship between home ownership and inequality which are raised in the literature but in our view inadequately interrogated in cross national perspective. These are:

- Is home ownership higher in more unequal countries and does this tenure expand in line with growing income inequality?
- Is access to this tenure worse in more unequal countries and is the gap between the home ownership rates of high and low income households wider? Does inequality in home ownership access increase in line with growing income inequality?
- Is home ownership less affordable for low income households in more unequal countries and is the affordability gap between high and low income home owners
wider? Does inequality in home ownership unaffordability increase in line with growing income inequality?

- Do low income home owners in more unequal countries live in poorer quality dwellings and does inequality in the standard of owner occupied dwellings increase in line with growing income inequality?

**Inequality and Home Ownership Rates**

Figures 1 and 2 compare the proportion of working age headed households accommodated in the owner occupied tenure in western European Union member states in 1997 and 2007 with GINI coefficient scores for that year. The 1997 data summarised in Figure 1 reveal that home ownership levels are generally higher in those countries characterised by higher inequality and *vice versa*. Thus Spain, Greece, the United Kingdom, Ireland and Italy are all characterised by GINI coefficient scores which are above the EU average for that year and above average home ownership rates, while Sweden, Austria, Germany and the Netherlands are characterised by greater equality and lower rates of home ownership than average in 1997. Although this picture is not uniform across the countries under examination as Belgium and particularly Portugal have lower levels of home ownership than would be expected.

Figure 2, reveals a rather different picture in terms of home ownership rates by 2007 as they equalised across many western European Countries due to marked expansion in this tenure in countries such as Sweden and Denmark and the Netherlands, which were distinguished by low owner occupation rates in 1997. Conversely in several of the counties where home
Figure 1: Home ownership and income inequality, working age population, 1997

Figure 2: Home ownership and income inequality, working age population, 2007
ownership rates were high in 1997 (specifically: Greece, Ireland, the UK and to a lesser extent Spain) this tenure had contracted by 2007.

Notably trends in GINI co-efficient scores between 1997 and 2007 follow a similar, albeit weaker, pattern. In Ireland and Spain inequality declined during this decade (and did home ownership concurrently). Conversely, in Sweden and particularly Germany which had low GINI coefficient scores in 1997 these rose by 2007 as did rates of home ownership.

**Inequality and Home Ownership Access**

Figure 3 details the proportion of working age households with incomes in the lowest quartile who had access to home ownership in 1997 and compares these to 1997 GINI coefficient scores. It reveals that low income ownership is relatively low (> 45 per cent) in the more equal countries (GINI coefficient of > 30) under examination such as France, Germany, the Netherlands, Sweden and Denmark. Conversely in several relatively unequal countries (GINI coefficient of < 30) such as Spain, Greece and Italy more than 65 per cent of low home households are home owners. However a considerable minority of countries do not conform to this pattern. Belgium for instance is characterised by a high GINI coefficient and relatively low rates of home ownership among low income households (43.1 per cent) while the opposite is the case in Austria, where the home ownership rate was 51.8 per cent among low income households and the GINI coefficient was 26 in 1997.
Figure 3: Access to home ownership (Q1 working age population) and income inequality, 1997

Figure 4: Access to home ownership (Q4:Q1), working age population, 1997
Figure 4 interrogates these trends in more detail by comparing the ratio of home owners with incomes in the lowest quartile with those in the highest quartile in 1997. It reveals that this gap is relatively narrow in many of the unequal countries and wider in more equal countries. For instance in Portugal, Spain, Greece and Italy high income households were less than 1.5 times more likely to be home owners than their low income counterparts in 1997. Conversely, in some more equal countries such as Germany, the Netherlands and Denmark high income households were more than 2.5 times more likely to be home owners than low income households. Again, not all countries conform to this pattern. Despite its low GINI coefficient, high income households in Austria are only 0.998 times more likely to be home owners than low income households.

In Figures 5 and 6 the same analyses are repeated using 2007 data in an effort to assess whether these trends have changed over time. Figure 5 reveals that the stagnation in overall home ownership rates during the preceding decade in countries where this tenure was traditionally dominant, was driven in large part by a decline in the proportion of low income households in this tenure. For instance in Spain, Ireland and the UK the proportion of low income households accommodated in the owner occupied sector fell by more than 5 per cent between 1997 and 2007. A marked rise of 10 per cent + in low income home owners drove the concurrent rise in the total home ownership rate in traditionally rental dominated countries such as France, the Netherlands, Sweden and Denmark. These trends are confirmed by the 2007 data on the ratio of low to high income home owners in EU15 countries which is presented in Figure 6. These data reveal that the gap between high and low income home owners narrowed between 1997 and 2007 in the Netherlands, France, Denmark and Sweden and widened in Greece, the UK, Ireland and to a lesser extent Spain.
Figure 5: Access to home ownership (Q1 working age population) and income inequality, 2007

Figure 6: Access to homeownership (Q4:Q1), working age population, 2007
Inequality and Home Ownership Affordability

Figures 7 and 8 examine variations in home ownership affordability by income group as indicated by the proportion of working age home owners who consider their housing costs ‘no burden at all’.

Figure 7 demonstrates that in less equal countries low income (quartile 1) home owners were generally less likely to say their costs were affordable, for example in Portugal 21.4 per cent of low income home owners were in this category, as were 9.4 per cent of the equivalent group in Spain, 13.3 per cent in Ireland and 3.6 per cent in Italy. Conversely in significant number of more equal countries low income homeowners were more likely to perceive their housing costs as affordable. The countries in this category include Denmark (61.6 per cent), the Netherlands (63.5 per cent) and Germany (57.5 per cent). However a number of countries do not conform to this pattern. Most notably in the UK, which had a relatively high Gini coefficient in 1997, 88.7 per cent of low income home owners reported that their housing costs were no burden at all in that year and affordability rates for this income cohort were also relatively high in Greece (47.9 per cent).
Figure 7: Affordable housing (Q1 working age homeowners) and income inequality, 1997

Figure 8: Affordable housing gap (Q4:Q1), working age homeowners, 1997
The data presented in Figure 8 confirms these trends. They reveal that in 1997 high income (quartile 4) home owners in Portugal, Spain and Ireland were over 2.5 times more likely to enjoy affordable housing costs than their low income counterparts. Conversely, high income home owners in Germany, the Netherlands and Denmark were less then 1.5 times more likely to enjoy affordable housing costs than their low income compatriots. A number of less equal counties do not conform to the “norm” of less equal distribution of affordability between income groups. In Greece, the UK and Belgium for instance, high income home owners are less than 1.5 times more likely to find their housing costs affordable than low income households, that is there is much less of a gap between high and low income households.

Figures 9 and 10 repeat the same analyses of home ownership affordability using 2007 data and reveal that trends in this regard changed significantly since 1997. Affordability among low income home owners improved between 1997 and 2007 in many of the countries characterised by low levels of affordability among this income cohort in the former year. In Ireland, Italy, Spain and Portugal for instance the proportion of low income home owners who find their housing costs no burden at all increased by more than 10 per cent over this decade. Conversely in Austria, France, the Netherlands and Germany the proportion of low income home owners in this category declined by 18 per cent + between 1997 and 2007. Therefore these data point to some evening up of inequalities in home ownership affordability among western European countries between 1997 and 2007, which reflects the concurrent evening up of GINI coefficient scores. However this trend is not evident in all of the countries under examination. In the UK and Greece for instance, low income home ownership affordability declined between 1997 and 2007, while despite the fact that affordability levels were high in Denmark in 1997, they improved further by 2007.
Figure 9: Affordable housing (Q1 working age homeowners), and income inequality, 2007

Figure 10: Affordable housing gap (Q4:Q1), working age home owners, 2007
Inequality and Home Ownership Dwelling Quality

In Figures 11 and 12, self reported high housing quality (measured with reference to the absence of major defects in the dwellings) are disaggregated by the income group of home owners. These data indicate that in some more equal countries low income home owners’ generally enjoy better housing quality and *vice versa*. Thus less then 55 per cent of low income home owners in Spain and Portugal enjoyed high housing quality in 1997 and both these countries had relatively high GINI coefficient scores by western European standards in the same year (see: Figure 11). At the same time in several more equal countries – specifically the Netherlands, Austria and Denmark, 79 per cent + of low income home owners enjoyed high quality dwellings. However a number of countries under examination do not conform to this pattern and there is very little difference between several countries with high GINI coefficients (namely: Ireland, Belgium and Italy) and low coefficients (France) in terms of the quality of dwellings occupied by low income households.

Figure 12 presents the housing quality gaps between high and low income homeowners in 1997 and reveals that the differences between more and less equal European countries are relatively small. For instance high income home owners in Denmark, the most equal country under examination, are 1.04 times more likely to have high quality dwellings than their low income compatriots, but the equivalent figure in Portugal (the most unequal country in this sample) is 1.15.
Figure 11: High housing quality, Q1 working age homeowners, 1997

Figure 12: Housing quality (Q4:Q1) by income inequality, working age home owners, 1997
Figures 13 and 14 set out the equivalent data for 2007. Figure 13 details the proportion of low income home owners who report high housing quality declined over the preceding decade in the majority of European countries for which data are available – Spain and Portugal being the only exceptions. Notably this decline was stronger in the more equal countries such as Denmark and Austria where housing quality among low income homeowners was particularly high in 1997 and the decline was weaker in more unequal countries such as Greece and Ireland where housing quality among home owners in this income quartile was lower in 1997. Thus during the decade under examination the (relatively modest) differences between these two groups of countries lessened further.

Figure 14 which presents the housing quality gaps between high and low income homeowners in 2007 reveals that inter-country differences in this regard remained modest in this year. High income home owners in Sweden, which had the lowest GINI coefficient in this sample, are 1.38 times more likely to live in high quality dwellings than their low income compatriots, but the equivalent figure for Portugal (the most unequal country in this sample) is 0.96. However, these data also reveal that in the majority of countries with low GINI coefficients (namely: Denmark, Austria, France and the Netherlands) the housing quality gaps between high and low income homeowners widened slightly between 1997 and 2007, while in less equal countries such as Italy, Ireland, Spain and Portugal the gaps between these income cohorts narrowed, thereby further equalising inter country variations in this aspect of home ownership inequality.
Figure 13: High housing quality (Q1 working age homeowners) and income inequality, 2007

Figure 14: Housing quality gap (Q4:Q1) and income inequality (working age home owners), 2007
Conclusions:

This paper has examined trends in income inequality and home ownership inequality in western European countries in 1997 and 2007 using data from the European Quality of Life Survey and European Community Household Panel (ECHP) survey. It has highlighted a number of issues which are significant for the key themes in the literature on home ownership and inequality.

Firstly the data on the proportion of households accommodated in the owner occupied sector presented here indicates that in 1997 home ownership rates were higher in the countries with higher GINI coefficients such as Spain, Greece, the UK and Ireland and lower in more equal countries such as Sweden, Austria, Germany and the Netherlands. By 2007 home ownership rates had expanded in the latter group of countries and their GINI coefficients had also risen albeit more modestly, while in the former group home ownership rates stagnated currently and their GINI coefficient scores declined. Broadly speaking therefore, this indicates that in case of western Europe, the home ownership higher in more unequal countries and tenure expands in line with growing income inequality.

Second, the data on the distribution of home access by income group presented above reveals that in 1997 low income ownership was relatively low (> 45 per cent) in the more equal countries (eg. France, Germany, the Netherlands, Sweden and Denmark where the GINI coefficient is > 30) and higher in more unequal countries (GINI coefficient of < 30) such as Spain, Greece and Italy more than 65 per cent of low home households were home owners that year. The 2007 data reveals that the stagnation in overall home ownership rates in countries where this tenure was traditionally dominant, was driven in large part by a decline
in the proportion of low income households in this tenure. For instance in Spain, Ireland and the UK the proportion of low income households accommodated in the owner occupied sector fell by more than 5 per cent between 1997 and 2007. A marked rise of 10 per cent + in low income home owners drove the concurrent rise in the total home ownership rate in traditionally rental dominated countries such as France, the Netherlands, Sweden and Denmark. This these data indicate that access to home ownership for low income households is positively correlated with wider income inequality and access improves and inequality rises and vice versa. This phone omen is most likely related to the positive relationship between the size of the owner occupied sector and income inequality which was highlighted above. As inequality rises, so do home ownership rates and in turn the proportion of low income households accommodated in this sector.

The preceding analysis also indicates that home ownership is less affordable for low income households in less equal countries and that that affordability increases in line with increasing equality and vice versa. In 1997, low home owners in less equal countries such as Portugal, Spain, Ireland and Italy, were significantly less likely to find their housing costs affordable than their counterparts in more equal countries such as Denmark, the Netherlands and Germany. Between 1997 and 2007 affordability among low income home owners improved in the countries in the former category (eg. Ireland, Italy, Spain and Portugal) and disapproved in several members of the latter group (Austria, France, the Netherlands and Germany).

The data examined here points to a similar, but much weaker, relationship between the quality of dwellings occupied by home owners and income inequality. In both 1997 and 2007 low income home owners’ in more equal countries generally enjoy better housing
quality and *vice versa*. However the differences between the more and less equal countries in this regard diminished over this decade in line with the concurrently diminution of inter-country variations in GINI coefficient scores.

Therefore the most significant finding of the analysis presented here is that the significant inter-country differences in home ownership inequalities evident in western European countries in 1997, particularly between the countries of southern and western Europe (Ireland, the UK, Spain, Italy and Greece) on the one hand and central and northern Europe on the other (Sweden, Denmark, the Netherlands, Austria and Germany), had significantly diminished by 2007. This evening up of home ownership inequalities reflected the wider equalisation of home ownership rates and decline in inter-country variations in income distribution as evidenced by the GINI coefficient.

Returning to the key themes in the literature on home ownership and inequality outlined in the introduction to this paper, our analysis indicates that home ownership did help to counterbalance wider inequalities in income distribution in 1997 as Frank Castel’s (1998) landmark article implies. Its role in this regard was particularly significant in the countries of southern Europe where home ownership rates were very high at this time, particularly among low income households, but a distinctive decommodified type of home ownership operated characterised by low rates of mortgage holding and strong familialist supports such as inheritance, self provisioning of housing and inter-generational living (Allen, *et al*, 2004). Due to rising rates of mortgage holding and decline low income ownership rates by 2007 home ownership played a less significant role in counterbalancing income inequality in southern Europe. Furthermore in the other relatively unequal countries under examination –
the United Kingdom and Ireland - home ownership is enabled by more widespread mortgage indebtedness and is therefore plays less of a role in counterbalancing income inequality.
References:


