HOWCOME Working Paper Series

No. 10

3 April 2015

HOWCOME

*Changing Housing Regimes and Trends in Social and Economic Inequality*

# Housing Regimes and Housing Outcomes in Europe

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www.tilburguniversity.edu/howcome

TILBURG UNIVERSITY

Funded by the
European Research Council
Grant Agreement No. 283615

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**Abstract**

Starting from a conceptualization of de-commodification in housing in terms of the right to decent and affordable housing, we formulate and test hypotheses with regard to the extent that this right is realized for low-income owners and renters across Western-European housing regimes. If differences in the mode of housing provision, allocation and consumption matter, then this should be visible in terms of varying configurations of housing outcomes, which furthermore transcend differences arising from different levels of economic affluence. Our results show that this is indeed the case. More state intervention in housing provision, in particular in the form of a regulated (unitary rental) market, results in good housing conditions and low housing cost burdens for all low-income tenure and age groups, but more so in the unitary rental-market countries of social-democratic signature compared to their conservative-corporatist counterparts. As the role of the family in housing provision increases, subjective housing cost burden also strongly increase, while housing conditions deteriorate. This begs the question whether outright homeownership in Southern-Europe is really as de-commodifying as has been suggested in the literature.

**Keywords**

Housing regimes, housing outcomes, housing and the welfare state, cluster analysis

## 1. Introduction and Theoretical Background

Researchers on the relationship between housing and the welfare state often lament about the lack of integration between comparative housing and welfare state research (e.g. Kemeny, 2001; Stephens and van Steen, 2011; Castles, 1998). Similar to other outcomes reflecting the social division of welfare (e.g. patterns of gender inequality; poverty and inequality), tenure and housing outcomes result from ideological power constellations determining the relationship between states, markets and families. The interplay between the prevailing housing regime and the wider welfare regime is however difficult to pin down. On the one hand, housing is a pillar of social policy, originally aimed at addressing the 'want', 'squalor' and 'disease' in the urban slums at the turn of the 20th century (Lowe, 2011; Fahey and Norris, 2011). Because of its capacity to generate 'superprofits', private renting was common for the *laissez-faire* liberal societies of this era (Kemeny, 1981). For the same reason, this tenure is however incapable of delivering decent and affordable housing for all. Moral considerations (improving living conditions) and other practical and ideological objectives (giving people a stake in the stability of the social order) urged governments to move housing into the realm of public policy. On the other hand, housing policy is often referred to as the 'wobbly' pillar under the welfare state (Torgersen, 1987). Given its capital-intensive nature, housing is mostly provided for by the coordinated action of different stakeholders (households, national and local governments, the market). State intervention consists of a wide array of direct, indirect fiscal and implicit (virtually unmeasurable) policy instruments and regulations (Ruonavaara, 1990; Kemeny, 2001; Fahey and Norris, 2011). While other social services (e.g. education, social security) are mainly (re)distributed by the state, the market is '*basic mechanism of distribution*' in housing: houses are sold and bought on the property market, while rental housing is mostly allocated by means of market contracts between landlords and tenants. Housing policy is therefore unique, as European welfare states mainly provide correctives to the market, in order to ensure that people's right to housing as a commodity is realized (Bengtsson, 2001: 259; Bengtsson, 2012). The 'wobbly pillar' is however by no means small, but given the wide range of policy instruments, it is impossible to arrive at an inclusive estimate of total public expenditure on housing (Fahey and Norris, 2011).

Although European housing regimes can be qualified in terms of the levels and forms of state intervention versus the role of the market and the family, they are notoriously hard to capture in a quantitative way. Firstly, there may be a disjunction between the *housing regime*, defined as '*the social, political and economic organization of the provision, allocation and consumption of housing*' (Kemeny, 1981, p. 13) and determined by power, ideology and culture, and the actual housing policies in a country (commonly referred to as the *housing system*) (Kemeny, 2001). Tenure structures are made up out of different segments – homeownership, private renting, and social renting – which all have their own set of housing policies. Interrelationships between housing market segments however vary across countries. The first housing policies were furthermore established more than a century ago, and are therefore

idiosyncratic to a certain extent: they are the result of (mostly path-dependent) policy choices across time, molded by different interest groups forming part of changeable coalitions. Concepts such as 'homeownership', 'public renting' and 'social housing' hence have different meanings and characteristics across time and space. Secondly, most housing policies have both a public and a private dimension, and depending its institutional embeddedness, the same policy can be either commodifying (increasing households' dependence on labor and housing markets) or de-commodifying (shielding households from the market). Forms of housing provision which are sometimes considered as 'commodified', such as 'private homeownership', often have a strong public dimension because of fiscal welfare. For the Netherlands, Boelhouwer and Hoekstra (2009) report that in 2005, government expenditure on homeownership amounted to €9,9 billion, compared to €1,8 billion being spent on rent allowance, the main subsidy for tenants. Distributional outcomes are furthermore dependent on the groups that are targeted and/or profit most. Research mostly shows that government subsidies for homeownership tend to be skewed towards higher incomes (e.g. Heylen, 2013). In Ireland and Norway however, a form of 'socialized homeownership', of a more strongly de-commodifying nature, was established. In Ireland, homeownership came within reach of most, through land reforms (turning tenant farmers into owners), the sale of public housing to urban renters and local authority mortgages (until 1987) (Norris, 2014). Fiscal welfare and low-interest mortgages, combined with high inflation, eroded the value of mortgage debt over time (Fahey, 2003), leading to high levels of outright ownership in later life among low-income households. In Norway, mortgage loans issued by the Norwegian State Housing Bank (Husbanken) resulted in high levels of homeownership across income groups (Gulbrandsen, 2004). These comparisons illustrate how different power constellations all promote homeownership, but redistribute housing wealth in a qualitatively different way. In the same vein, it is equally possible that similar policy goals and distributional outcomes are realized by means of varying mixes of housing and welfare policies. While social-democratic Norway opted for a universalistic take on homeownership by '*combatting the property rights of the few (landlords) by spreading homeownership among the many (tenants)*' (Gulbrandsen, 2004: 166), in Sweden universal housing policies aimed at tenure neutrality, meaning that all households should have access to all tenures (Bengtsson, 2001).

This complexity in terms of qualifying and quantifying housing policies, both in comparative perspective and in relation to the welfare system (social security and welfare benefits), has resulted in a separate field of 'housing studies', characterized by a strong focus on (comparative) case studies of specific housing policies. Housing is so complex that international housing research is more often descriptive/exploratory rather than analytical/explanatory, and hence not actually 'comparative' (Oxley, 2001). In such a context, attempts at quantifying are even more difficult. An emerging stream of literature is however trying to link cross-national variations in housing regimes to housing outcomes. Most of these studies utilize country-level institutional indicators and/or aggregate housing outcomes – i.e. not for specific tenure or social groups. Cleavages between countries with regard to housing

standards are related to differences in economic affluence, '*historical differences in the availability of public and private finance for housing*' (Norris and Shiels, 2007: 74) or its form – in particular the legacy of the Eastern-European Housing Model, and family support (Mandic and Cirman, 2012; Norris and Domanski, 2009).[1] The main differences appear between Southern Europe and the Northern states of the EU-15, and between the Old and the New Member States of the Enlarged European Union (EU). Mandic and Cirman (2012) find that housing conditions in the latter are better than expected given the level of economic affluence, suggesting a 'positive' rather than a 'negative' legacy of the Eastern-European Housing Model. When looking more in-depth at inequalities related to homeownership, Norris and Winston (2012) again conclude that differences between Southern and Northern Europe are larger than between the different rental regimes located within the North. They also suggest that the housing regimes literature should take better account of the familialistic mode of housing provision in Southern Europe, which leads to high levels of outright ownership and hence de-commodifies by reducing market dependence (also see Fahey and Norris, 2011). Housing outcomes of renters are however not considered. More recently, Borg (2014) finds that controlling for economic affluence, different rental regimes do impact on the extent of housing deprivation across European countries, but again, outcomes relate to the whole population rather than to specific tenure or social groups. This makes it hard to distinguish between the specified mechanisms explaining such an effect.

The aim of this paper is to evaluate housing regimes by their outcomes. If institutional differences between housing regimes matter, then this should be visible in terms of varying configurations of housing outcomes (e.g. Mandel, 2009: on configurations of gender inequality). We expect that systematic differences in the levels and forms of state intervention and in the mode of housing provision, allocation and consumption shape typical, identifiable patterns of housing outcomes. We further improve on earlier research by developing a more theoretically-informed view on housing outcomes. Rather than relying on the available, limited range of country-indicators, we circumvent the problem of '*trying to capture in a single statistic the complexity of housing provision across a whole country*' (Oxley, 2001: 102) by developing and operationalizing a 'welfarist' concept of de-commodification in housing, based on the original goals of housing policy: correcting for market failure by providing households at the bottom of the income and housing distribution with the 'right to housing'. This concept is operationalized in terms of a range of housing outcomes for low-income owners and renters at two time points, 1995 – before or at the onset of housing market liberalization, and 2012 – following the economic crisis induced by housing market liberalization. We take account of the country-level association between outright homeownership in later life and the generosity of social programs, in particular public pensions, as an additional dimension which is not straightforwardly linked to other

[1] Mandic and Cirman (2012: 777) state that economic development is the '*biggest single factor explaining variations in housing conditions across the EU*'.

structural features of housing regimes (Castles, 1998; Delfani et al., 2014; De Decker and Dewilde, 2010), and specify housing outcomes for different age groups.

The idea that housing regimes can be evaluated in terms of their housing outcomes for low-income 'young' and 'elderly' owners and renters is for both time points tested by means of a cluster analysis. We validate our results externally by means of criterion indicators referring to commonly used institutional features of housing policies and economic affluence. We use data from the European Community Household Panel (ECHP, 1995) and the EU-Statistics on Income and Living Conditions (EU-SILC, 2012) for 15 Western-European countries: Belgium (BE), Finland (FI), France (FR), United Kingdom (UK), Ireland (IE), Austria (AT), Germany (DE), Denmark (DK), the Netherlands (NL), Norway (NO), Spain (ES), Greece (GR), Italy (IT), Portugal (PT), and Sweden (SE).

## 2. Conceptualizing De-Commodification in Housing

Given the complex nature of housing provision, there is no generally accepted definition of 'de-commodification' in housing. An exception is Doling (1999), who points out that de-commodification in housing cannot be simply equated with state provision, and that welfare in housing should be seen in terms of social rights and individual welfare, as well as the extent to which these are independent of income. Evaluating housing systems in this way for a larger number of countries is however near impossible, given that, as explained above, there is no one-to-one relationship between specific policies and their distributional outcomes. Hoekstra (2010: 35) defines de-commodification as the '*extent to which households can provide their own housing, independent of the income they acquire on the labor market*'. We take a different approach in this paper, as we prefer a more general definition of the market (including the labor and housing market) and a more specific definition of housing, in terms of the right to housing and the link with welfare. As the first housing policies were established in order to deal with the lack of welfare caused by market failure at the bottom of the housing and income distribution, the 'right to housing' is a '*political marker of concern pointing out housing as area for welfare state policy*' (Bengtsson, 2001: 256). In practical terms, the right to housing can be specified in terms of the *access to both decent and affordable housing*.

As explained in the previous section, different welfare states have developed variegated public-private welfare mixes in order to ensure the right to housing. Combined with the commodity nature of housing, this implies that this right may only be partly realized. We therefore use an operational 'welfarist' definition of de-commodification, in the sense that *housing regimes are more de-commodified to the extent that housing for all is realized as a social right – hence, to the extent that low-income households have access to both decent and affordable housing.* We thus assume that access to decent and affordable housing mainly results from a higher level of state intervention, while suboptimal housing outcomes may either result from a higher reliance on the market, or from a stronger role for the

family when both market and state provision of housing are lacking. The complement of de-commodification may hence either be commodification or a pre-commodified form of risk pooling between generations (e.g. Delfani et al. 2014) – 'reciprocity' in Polanyi's words.

Given its continuing importance in the debate on housing and the welfare state (Fahey and Norris, 2011; Stephens et al., 2015), we include 'access to outright homeownership' as an important complementary dimension of the access to decent and affordable housing. A recurrent debate refers to the alleged trade-off between homeownership and pensions. Initially, Kemeny (1981) suggested an inverse relationship or trade-off between generous pensions and homeownership, and explained it in terms of the frontloading of the costs of acquiring homeownership: the considerable financial means necessary to purchase a house would compromise the willingness to accept high tax-burdens necessary to finance generous social transfers, in particular those benefiting the older population – most of whom are outright owners by the time of retirement. This 'affordability argument' was extended to the macro-level by Fahey (2003) in order to explain relatively low social expenditure in Ireland. He suggested that the more a state spends on subsidising homeownership, the less it will be able to set aside for social expenditure. Accounting for the comparatively low social spending in 'New-World' English-speaking welfare states, Castles (1998) turned around the affordability argument by proposing that the early promotion of homeownership diminished the need for generous social security programs. Homeowners can get by on a lower pension because homeownership limits their housing costs in old age. In his later work, Kemeny (2005) incorporated this idea in debates on welfare state retrenchment and privatisation. Homeownership not only provides a means for fulfilling housing needs, but has also become an important 'depository for savings' that can be released to offset the consequences of (future) cuts in government spending on pensions and care. We conclude from this literature that outright ownership is an important dimension of access to mainly affordable (not necessarily decent) housing.

The conceptual status of outright homeownership is somewhat ambiguous: while in many countries outright homeownership in later life is the consequence of considerable state promotion of homeownership or of the transfer of housing capital from the state to households (e.g. right-to-buy, privatization of state-provided housing), outright homeownership may also result from inadequate housing and welfare policies, as households literally build their own form of protection, unsupported by the state. This is the case in Southern Europe.

Kemeny (1981) hypothesized that the total cost of housing in a society is higher to the extent that housing is privatized, i.e. mortgaged homeownership and private renting. As all market actors in the chain of housing provision maximize profits at each phase of the process, overall housing costs, and hence higher average housing costs for individual households are higher and housing is less affordable (Bratt et al., 2013) – compared to a system where housing provision would be more collectivized. Given these higher housing costs, together with the fact that in a more marketized regime, the housing needs

of part of the population will not be met because of market failure, we hypothesize that in countries where the role of the market in housing provision is larger, low-income households have less access to affordable housing.

While suboptimal housing outcomes in a market-dominated regime of housing provision arise from market failure and higher housing costs, we also expect suboptimal outcomes in regimes where the (extended) family is more important, given that the division of welfare is based on more particularistic principles. Family strategies come into play when risks are not picked up by the state – Norris and Domanski (2009) find that they are associated with self-promotion, poor building standards and overcrowding. Average housing costs in these countries are however limited by the quasi-insurance function of outright homeownership, providing both security of tenure and low-cost living, in particular for the elderly. We thus hypothesize that in countries where the role of the family in housing provision is larger, low-income households have less access to decent housing.

## 3. European Housing Regimes in 1995 and 2012

In this section, we follow up on the general hypotheses formulated above, and discuss the implications of different housing regimes for the access to both decent and affordable housing of low-income owners and renters. The tension between housing as a commodity distributed by the market and/or the family, and as a right which should be protected by the state, has been resolved in different ways. In countries like Belgium, Finland, France, Norway, Ireland and the United Kingdom (UK), high homeownership results from sustained policy efforts, reflecting an ideological preference for the provision of mortgaged homeownership allocated through the market but encouraged by the state. Depending on historical and ideological factors, the promotion of homeownership in different countries however resulted in a different access for low-income households with regard to (outright) homeownership, in particular in countries where this tenure partly functions as a pension, e.g. Ireland and Belgium (De Decker and Dewilde, 2010), or where government mortgages were made available, e.g. Ireland and Norway.

High homeownership rates furthermore do not necessarily result from a market-based system of housing provision. According to Allen et al. (2004), the strong growth of homeownership in Southern Europe in the post-war period can be linked to strict rent controls. Rent regulation negatively affected profitability of private rental housing – leading to a strong decline of the tenure over time. In Spain and Italy, significant amounts of public housing units were furthermore sold to sitting tenants. Hence, the driving force of increasing homeownership rates in Southern Europe was not so much the extent of active support for this tenure, but rather the conscious lack of government support of the other tenures. Gaps in housing provision were solved within the extended family. ‘Informal’ cheap routes to self-provisioned homeownership were sustained by weak land use and building standard regulations until the 1980s, within a context of economic restructuring and internal migration (Poggio, 2013; Cabré Pla

and Módenes Cabrerizo, 2004). This rapid expansion of homeownership in Southern Europe transformed these societies from renting to owning nations, be it of a specific nature.[2] In recent decades, stricter regulation has resulted in a shift towards more a market-based production of homeownership, with access to homeownership becoming less affordable.

Most countries with high homeownership are characterized by a strong divide between an unregulated private rental sector and a small social housing sector, as the latter is targeted at low-income households – they have a 'dual rental market'. In general, the smaller the non-profit sector, the more deprived its tenants, and the more allocation is based on criteria of need and deservingness (Lowe, 2011). (Private) renting in these countries is more strongly associated with a lower socio-economic position and a less favorable price/quality ratio (Winters and Elsinga, 2011). In countries with a 'unitary rental market', often but not always with a history of sustained social-democratic hegemony, housing provision is organized differently. In Sweden, Denmark, Germany, Austria and the Netherlands, the competition and less clear-cut distinction between larger, but more strongly regulated, public and private rental sectors results in good-quality housing across tenures and income groups (Kemeny 1981, Lowe 2011).

The key dimensions underlying these housing regimes, reflective of the mode of housing provision and influencing housing outcomes for low-income owners and renters, concern access to (outright) homeownership, and the type and size of the (social) rental market. We expect that access to affordable housing for low-income elderly and younger owners is strongly associated with variations between countries in outright homeownership, but that access to decent housing varies according the way through which outright homeownership has been achieved (state promotion or self-provisioning). With regard to the type and size of the rental market, in dual rental markets the right to housing for low-income households is protected by selectively allocating them to residual social housing shielded from the market. In unitary rental markets, all households are enabled to satisfy their housing needs through state intervention in the rental market itself (Bengtsson, 2001). The implications of this difference for the housing outcomes of low-income renters are however not straightforward. In unitary rental markets, social landlords not only consider need, but also the ability to pay – public housing has hence been allocated mainly to those with income slightly higher than the poorest groups (Doling, 1999). Dual rental countries with selective, but generous housing allowances for the poor and with fairly large targeted social housing sectors (e.g. the UK and France) may produce better outcomes for low-income households compared to unitary rental countries with a public rental sector catering to the middle groups. We expect the worst housing outcomes for low-income young and elderly renters in dual rental markets with small social housing sectors, unable to protect the right to housing for all low-income households

[2] With the exception of Greece, which is the only country where homeownership rates were already high in 1960.

in need, and in countries where the role of the state overall is smaller, and outright homeownership is a more important way to secure access to decent and/or affordable housing.

Our final hypothesis concerns the changes between 1995 and 2012: we expect that configurations of housing outcomes have become blurred over time. Changes affecting countries across different housing regimes pertain to the deregulation of housing finance, resulting in a strong increase in mortgage debt and house prices in Ireland, Denmark, the Netherlands, Spain and Portugal (see Table 1). Another change concerns the liberalization of the rental sector in mainly unitary rental-countries, which is hard to quantify and also differs between countries. In the Netherlands, there has been a marked rise in homeownership since the 1990s, combined with an ongoing discussion about the role of social housing (Elsinga et al., 2008). In Germany, state support for non-profit providers of rental housing has been reduced since the end of the 1980s, leaving them to compete on a more equal basis with private providers (Clapham and Kintrea, 1996). The large increase private rental stock in Germany (see Table 1) can be explained by a sustained conversion of social into private rentals, although as explained before, the distinction between both sectors is less clear-cut. In the Nordic countries, pressures towards more marketization also play out differently. Given the strong mobilization of interest groups (e.g. tenant associations), attempts to liberalize the rental sector were less successful (Ruonavaara, 2011). In Sweden however, the introduction of market-like rents and the conversion of public to private rental stock resulted in problems for lower-income groups (Holmqvist and Magnusson Turner, 2014).

## 4. Data and Methods

### *Data and indicators*

We use data from ECHP and EU-SILC for two time points, 1995 and 2012, and 15 Western-European countries. These sources serve as the main reference for the European Union (EU)-indicators on income, living conditions and social exclusion. The sample of households and individuals is representative of the population in each year and each country. Cross-national comparability is guaranteed through a standardized design and common procedures. Although in housing studies the unit of analysis is the dwelling or the household, our main interest concerns the access to decent and affordable housing of low-income respondents. In research on poverty and inequality, the analytical focus is on the individual within the context of her household. Larger households are generally less wealthy (per capita) than smaller households, hence using the individual as unit of analysis ensures that the welfare of each person is weighted equally. As students in higher education in different countries have different propensities to live away from home, we removed individuals in a household with a reference person still at school. Individuals in a household with a reference person aged 60 or younger are ‘young’, the others are classified as ‘elderly’.

Respondents with a household equivalent disposable income[3] in the two bottom quintiles are considered low-income. *Affordability* is defined in terms of the ratio of housing costs to income, although we apply a variable threshold. A fixed threshold (e.g. 30 or 40%) makes the unjustified assumption that the residual income a household needs to cover non-shelter needs is lower as household income decreases. Research has furthermore shown that – when compared with the residual income approach – the ratio-approach defines the situation of low-income households as less problematic (Heylen and Haffner, 2013). We therefore use a 25%-threshold for decile 1-2 and a 30%-threshold for decile 3-4. Housing cost ratio's equal to or above the threshold indicate affordability problems. Next to this 'objective' indicator of housing costs, we also look at the % of respondents who consider total housing costs as a *heavy financial burden*, which is more reflective of the lived experience of respondents. Decent housing is operationalized as *housing conditions*, the average number of problems out of five indicators: leaking roof, damp walls, floors, foundation, rot in window frames and floors; no bath or shower; no indoor flushing toilet; dwelling is too dark, not enough light; crowding. Our definition of crowding relates the number of rooms to the number of household members in the following way: one room for the household; one room for each couple; one room per single person aged 18 or older; one room per pair of single persons of the same gender between 12 and 17; one room per single person between 12 and 17 not included in the previous category; one room per pair of children under 12. *Outright homeownership* simply refers to the % of respondents in homeownership with no mortgage.

Comparability problems between ECHP and SILC relevant for this paper pertain to the definition of housing costs, in particular for owners. While housing costs in ECHP refer to the actually paid rent for renters and total mortgage costs (principal repayment plus interest) for owners, in EU-SILC the initial focus was on 'total housing costs': all costs connected with the household's right to live in the accommodation. Utility costs (water, electricity, gas, heating) are also included. Although for renters it is possible to construct a 'housing costs'-variable comparable to ECHP, for owners this is only possible from 2010 onwards, when the necessary information on both mortgage interest and principal repayments is included. Given that utility costs are determined partly by housing conditions, we prefer to use the 'original' ECHP-housing cost variable pertaining to rental costs for renters and mortgage repayments (interest and principal repayments) for owners, which is available for both time points: 1995 and 2012.[4]

[3] Using the modified OECD-equivalence scale.

[4] Amounts are gross of housing allowances (i.e. including housing allowances), but housing allowances are also included in disposable income, hence cancel out in the housing costs ratio. For mortgage repayments, amounts net of tax relief were used when reported, or approximated by applying a net/gross factor specific to each household when amounts are indicated as gross of tax relief, and mortgage interest deduction applies in a country. In ECHP, a net/gross factor is available in the data. We constructed a comparable net/gross factor for EU-SILC. The net/gross factor was applied for Belgium, Denmark, Ireland and the Netherlands for ECHP and for Belgium, Denmark, and the Netherlands for EU-SILC.

***Empirical strategy***

We evaluate the extent to which housing regimes 'produce' different configurations of outcomes in terms of access to decent and affordable housing for 'young' and 'elderly' low-income owners and renters, and in terms of outright homeownership, in 1995 and 2012 by means of cluster analysis. Cluster analysis is an explorative technique for organizing cases – countries – in clusters, based on a number of observed (measured) characteristics. Available algorithms are aimed at maximizing the similarity of cases within each cluster, while maximizing the dissimilarity between country clusters. Cluster analyses in itself however provides no substantive explanation or interpretation with regard to the identified country groups. However, by including only housing outcomes in our analyses, we can evaluate to what extent typical outcome patterns correspond to our theoretically identified key dimensions indicating housing regimes.

Clustering methods use distances between objects when forming clusters. Distances can however be measured in many ways, and there are also different methods to calculate distances between clusters. Different algorithms furthermore lead to different results. The most straightforward, efficient and most used form of cluster analysis is hierarchical cluster analyses, using squared Euclidean distances and Ward's method[5] for cluster merging. As not all indicators are measured on the same scale, they have been transformed into *z*-scores. We validate the cluster solution by assessing its criterion validity (Mooi and Sarstedt, 2011). If there are significant differences between clusters with regard to both cluster and criterion variables – variables which should be theoretically associated with the clustering variables, but are not included in the analysis – then the clusters form distinct groups. Criterion validity is assessed by means of different institutional features of housing policies: the availability of mortgage credit indicating marketization, measured in terms of Residential Mortgage Debt (expressed as a % of GDP); and the size of the social and private rental stock (% of total housing stock). Significant differences between clusters on both cluster and criterion variables strengthen confidence that housing regimes produce distinct housing outcomes for low-income groups. We also evaluate the relevance of economic affluence for distinguishing between clusters.

[5] '*Cluster membership is assessed by calculating the total sum of squared deviations from the mean of a cluster. The criterion for fusion is that it should produce the smallest possible increase in the error sum of squares*' (Burns and Burns, 2008: 557).

## 5. Results

### *1995*

Results for 1995 are based on 12 countries: for Germany and Sweden not all indicators are available, while Norway was not included in the ECHP. Based on the dendrogram[6] (Figure 1), we opt for a four-cluster solution, which we validate externally by means of our criterion variables. Figure 1 clearly supports the idea that different 'modes' of housing provision, allocation and consumption as well as their translations into housing policies, are associated with different configurations of housing outcomes for low-income 'young' and 'elderly' owners and renters. This is also clear from Table 2, which shows that between-cluster differences are statistically significant at the 0,05-level for 9 out of 14 housing outcomes, and at the 0,10-level for all but one indicator. Rather than by economic affluence, different patterns of access to decent and affordable housing and outright homeownership seem driven by institutional features of housing systems, in particular the availability of mortgage credit and the size of the social rental sector. The Southern-European countries form a separate cluster (high levels of outright homeownership for both young and elderly low-income respondents), as well as 'unitary' Denmark and the Netherlands (low levels of outright homeownership for young and elderly low-income respondents). The remaining countries are gathered in two separate clusters. Finland, France and the UK form a cluster which is characterized by a dual, but fairly large social housing sector (18,3% on average), compared to the cluster containing Austria, Belgium and Ireland. Belgium and Ireland have small dual rental sectors of 7 and 11% respectively. Austria (although characterized as a unitary rental market) seems clustered in this group because of the high access to outright homeownership among low-income young households (61,4%, compared to only 7,5% on average for the 'unitary' cluster formed by Denmark and the Netherlands). This is in line with our external criterion variable referring to the availability of mortgage credit, as mortgage debt in Austria in 1995 only amounted to 5% of GDP.

Reading from left to right, country clusters display a decreasing level of mortgage debt – indicating the 'marketization of homeownership' –, which is associated with an increasing access to low-income outright homeownership, in particular for the young. Countries with higher levels of mortgage debt however also have larger public/social housing sectors. Increases in homeownership in the unitary rental market-countries of Cluster 1 (DN, NL) happened more recently compared to 'traditional homeownership' countries, but mainly came about through mortgage deregulation. An importance difference with the other clusters pertains to the lower access to outright homeownership for low-income elderly (53,4% compared to figures around or above 90% for the other clusters), who may either find themselves in the rental sector (more common) or in ownership with a mortgage (less

[6] The agglomeration table would suggest five clusters, but we prefer to consider the Southern-European countries as one group, given that they are merged at a smaller distance compared to the other clusters (see Figure 1).

common). Furthermore, low-income young and elderly owners and renters all experience few problems with housing conditions. In line with our expectations, the strong regulation of the (rental) market (and hence the larger role of the state in housing provision) has as a result that low-income older and younger households resort far less to outright homeownership (achieved through state promotion or the family) as a strategy to guarantee access to affordable and/or decent housing. Young and elderly low-income owners (of which some are not outright) experience few affordability problems, which is also in line with our expectations. Although 'objective' housing affordability problems for renters are (very) high in this cluster compared to other country groups, low-income renters report the least problems in terms of the subjective housing cost burden. Rental housing may consume a larger part of household income (i.e. above the threshold) for more respondents in these countries, but the residual household income seems high enough to avoid total housing costs being experienced as a heavy burden. This may be partly related to better housing conditions (incurring less additional housing costs on top of rent or mortgage), but it may also be the case that the 'objective' indicator based on the housing cost ratio is more suitable for comparison within than between countries, in particular between countries with different levels of affluence. Cluster 2 consists of countries with a dual, but larger social rental sector, medium-high levels of mortgage debt and medium-low level of outright homeownership for young low-income respondents, which results in higher objective and subjective housing costs burden for young owners. Looking at the subjective housing cost burden, low-income renters experience more problems compared their counterparts in Cluster 1, which does not conform our expectations. Social housing in dual rental market-countries may be allocated more on the basis of need than public housing in unitary rental market-countries, but the larger size of the latter seems to result in better aggregate outcomes for low-income renters. The main difference between Cluster 2 (FI, FR, UK) and Cluster 3 (AT, BE, IE) with regard to housing outcomes pertains to the housing conditions and housing cost burden of low-income renters, which is worse in Cluster 3, as the needs of fewer low-income renters are met through social housing. Housing outcomes for low-income owners in Clusters 2 and 3 are not very different, suggesting a trade-off between medium-high and medium-low levels of mortgage credit and (state-supported) outright homeownership.

High levels of outright ownership for the young and low levels of mortgage credit are associated with low objective affordability problems combined with high subjective total housing cost burdens for low-income owners, which may be partly explained by worse housing conditions – in particular with regard to the difference between Cluster 4 (ES, IT, GR, PT) versus Cluster 2 (FI, FR, UK) and Cluster 3 (AT, BE, IE). This confirms the hypothesis that a stronger role for the family in housing provision is associated with lower access to decent housing. The more outright homeownership and the less state involvement in housing provision (e.g. less social housing, less state support for achieving outright homeownership), the worse furthermore the position of low-income young and elderly renters in terms of housing conditions and subjective housing cost burdens.

To summarize, we conclude that different housing regimes – ideological power constellations determining the interplay between states, markets and families with regard to the provision, allocation and consumption of housing – result in housing policies which have distinctly patterned consequences for the housing outcomes of low-income owners and renters. These patterns are furthermore associated with a number of external 'criterion' variables indicating structural features of housing regimes, although these variables only capture some aspects of a complex reality.

***2012***

Results for 2012 are reported in Figure 2 (Dendrogram) and Table 3 (means of cluster variables and criterion variables). Germany, Norway and Sweden are now included. A four-cluster solution again seems preferable, and this is supported by the fact that for most housing outcomes for low-income young and elderly owners and renters, there are significant differences to be found between the average values for different clusters. Although some countries have been added and other countries have switched position, we find that differences between 1995 and 2012 are not that large, and that the underlying dimensions defining housing regimes (partly reflected through our external criterion variables) result in similar configurations of housing outcomes.

Cluster 1 again consists of the unitary rental market-countries with high mortgage debts and a larger public rental stock (Sweden, Denmark, the Netherlands). The average value for the latter indicator is smaller compared to 1995, mainly because of the inclusion of Norway in this cluster. Based on the pattern of housing outcomes, it is however clear that universalistic homeownership policies in social-democratic Norway have resulted in a more or less similar realization of the right to decent and affordable housing for low-income households as in the social-democratic unitary rental market-countries. Again, these countries combine low levels of outright homeownership with decent housing conditions for low-income young and elderly renters and owners, and the lowest subjective housing cost burdens. Compared to 1995, subjective housing cost burdens did however increase for low-income renters, and low-income 'young' owners.

Cluster 2 has been reshuffled and now contains Finland, the UK, Austria and Germany. These are however again countries with a fairly large social/public rental sector – compared to Cluster 3, which mainly consist out of countries with a dual, small social housing sector. A main difference between Cluster 2 and Cluster 3 therefore again refers to the housing outcomes of low-income young and elderly renters, which are more favorable in Cluster 2 (better housing conditions, lower housing cost burdens). Compared to 1995, in 2012 the differences between low-income owners are larger and less favorable in Cluster 3, but this is probably due to the inclusion of Spain and Portugal (see further). Again, we find that increases in outright homeownership, in particular for the young – which can be interpreted as an indicator of family-based housing provision – are associated with less access of low-income households

to decent housing. Similar to the results for 1995, more outright homeownership is associated with less affordability problems based on our objective housing costs-to-income ratio, but with higher experienced burdens with regard to the total housing cost. Earlier we noted that of the Southern-European countries, Portugal and Spain experienced the largest increase in mortgage debt between 1995 and 2012. This change in the way that housing is provided is – also after the economic crisis – reflected in the pattern of housing outcomes, as they have now joined Cluster 3 (further consisting of Belgium, Ireland and France, which are traditional 'mortgage'-based homeownership countries with medium-high levels of state-supported outright homeownership). Greece and Italy have kept their 'Mediterranean' character between 1995 and 2012, although outright homeownership among the young declined to 75,6%, still a high figure in comparative perspective.

Although not the main concern of this paper, we note strong increases between 1995 and 2005 in affordability problems of low-income renters, and in housing cost burdens of low-income owners and renters in both age groups. We also find that between-cluster differences in economic affluence matter in 2012 – this may be related to the impact of the economic crisis. Differences in the size of the rental stock are no longer significant.

## 6. Conclusion

Starting from the conceptualization of de-commodification in housing in terms of the right to housing, and its operationalization in terms of the access to decent and affordable housing and to outright homeownership for low-income respondents across European countries, we conclude that different modes of housing provision, allocation and consumption result in clearly identifiable patterns of housing outcomes. The ideological power constellations defining housing regimes, and their translation into housing policies, can hence be evaluated by their outcomes. Different configurations of housing outcomes for low-income young and elderly owners and renters furthermore transcend differences arising from differences in economic affluence.

We re-iterate our main results in function of our expectations. We find that more state intervention, in particular in the form of a regulated (unitary rental) market, results in good housing conditions and low housing cost burdens for all low-income tenure and age groups. This is however only true for the unitary rental-countries with a social-democratic heritage (Cluster 1), as the unitary rental market-countries with a conservative-corporatist welfare regime tend to cluster together with the dual-rental market countries with a large social housing sector (Cluster 2). Welfare systems exogenous to housing may thus also matter for configurations of housing outcomes (see for instance Stephens and van Steen, 2011). Welfare systems are not considered in the current paper, which may be considered as a shortcoming. We find no evidence that low-income renters are better off in countries with a large social housing sector compared to a large public housing sector, but the segment as such is still larger

in the latter countries, which makes it hard to arrive at a clear conclusion. Low-income renters are worse off in countries with a smaller-sized dual rental sector (Cluster 3 and Cluster 4), as the housing needs of less low-income respondents can be met effectively (larger role for the market). Interpreting increasing levels of outright homeownership for young low-income respondents as an indicator of familialism, we find that a larger role for the family in housing provision is, as expected, associated with less access to decent housing. Based on the housing costs-to-income indicator of affordability problems, increasing outright homeownership is not associated with better housing affordability. The opposite is however true when we use an indicator based on the lived experience of low-income respondents, the 'subjective' total housing cost burden. As the role of the family in housing provision increases, subjective housing cost burden strongly increase, while housing conditions deteriorate. This raises the question whether outright homeownership in Southern-Europe is really as de-commodifying as has been suggested in the literature (Fahey and Norris, 2011). Low-income respondents in low-quality outright homeownership seem to experience high housing-related costs which have to be paid for in the market, e.g. for energy.

We find an even stronger discrepancy when comparing our 'objective' and 'subjective' housing costs indicators for low-income renters. While decreasing state intervention and increasing familialism are associated with an increase of the subjective total housing cost burden, they are associated with decreasing affordability problems based on the housing costs-to-income ratio (although affordability problems are again higher in the Southern-European countries than in Cluster 3). The latter indicator may hence be more suitable for comparison *within* countries than between countries. Note however that a similar indicator of affordability problems used by EUROSTAT refers to total housing costs, rather than to rent or mortgage costs, as was the case in this paper. The comparability problem may however extend beyond the type of housing costs included or excluded.

Although the outcomes of cluster analyses are always dependent on the variables that are entered, we conclude from this paper that – when conceptualizing and operationalizing housing outcomes in a way that relates back to the goals of housing policy, i.e. correcting for market failure by providing households at the bottom of the income and housing distribution with the 'right to housing' – results in clearly identifiable configurations of housing outcomes, reflective of the underlying housing regimes.

**Acknowledgements**

This research was supported by the European Research Council (Grant Agreement No. 283615, www.tilburguniversity.edu/HOWCOME). ECHP and EU-SILC data were provided by Tilburg University.

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**Tables**

**Table 1.** Trends in European housing regimes between 1995 and 2012

| Country | Private rental stock, %-point change | Social rental stock, %-point change | Mortgage debt/GDP, %-point change |
|---|---|---|---|
| AT | -5 | 0 | 22,7 |
| BE | -5 | 0 | 25,7 |
| DE | 17 | -21,4 | 0,8 |
| DK | -4 | 1 | 37,9 |
| ES | -5 | 0 | 44,5 |
| FIN | 4 | 2 | 14,2 |
| FR | 1 | 0 | 23,2 |
| GR | -6 | 0 | 34,5 |
| IE | 3,3 | -2,3 | 54 |
| IT | 5,6 | -0,7 | 15,2 |
| NL | -7 | -4 | 65,2 |
| NO | - | - | 26,7 |
| PT | -10 | -0,7 | 48,6 |
| SE | -3 | -2 | 24,5 |
| UK | 5,6 | -6 | 27,7 |

Sources: Balchin (1996), CECODHAS (2011), European Mortgage Federation.

**Table 2.** Means of cluster variables referring to housing outcomes and of criterion variables, 1995

| Clusters | Cluster 1 DK, NL | Cluster 2 FI, FR, UK | Cluster 3 AT, BE, IE | Cluster 4 ES, IT, GR, PT | ANOVA F-test |
|---|---|---|---|---|---|
| *Cluster variables* | | | | | |
| Affordability problems young owners | 6,49 | 20,85 | 5,15 | 5,42 | 17,893** |
| Housing cost burden young owners | 5,91 | 22,54 | 21,70 | 35,92 | 3,811(*) |
| Housing conditions young owners | 0,29 | 0,47 | 0,44 | 0,93 | 14,754** |
| Affordability problems young renters | 43,10 | 49,92 | 18,65 | 31,29 | 3,080(*) |
| Housing cost burden young renters | 12,69 | 24,94 | 46,62 | 61,32 | 8,803** |
| Housing conditions young renters | 0,59 | 0,85 | 0,96 | 1,42 | 3,445(*) |
| Outright homeownership young | 7,49 | 29,06 | 44,34 | 84,29 | 29,013*** |
| Affordability problems elderly owners | 6,93 | 2,77 | 0,84 | 0,83 | 36,469*** |
| Housing cost burden elderly owners | 4,63 | 9,31 | 14,76 | 30,09 | 6,014* |
| Housing conditions elderly owners | 0,24 | 0,44 | 0,48 | 0,96 | 3,406(*) |
| Affordability problems elderly renters | 60,79 | 53,84 | 20,74 | 33,59 | 1,891 |
| Housing cost burden elderly renters | 7,60 | 18,62 | 33,47 | 59,60 | 6,562* |
| Housing conditions elderly renters | 0,26 | 0,60 | 0,73 | 1,36 | 4,483* |
| Outright homeownership elderly | 53,43 | 89,06 | 90,29 | 96,44 | 15,970** |
| *Criterion variables* | | | | | |
| GDP per capita (US$ PPP, 2005) | 28268,00 | 24029,00 | 25247,67 | 20355,50 | 3,725(*) |
| Residential Mortgage Debt/GDP | 53,05 | 34,43 | 17,20 | 11,75 | 6,334* |
| Social rental stock | 27,00 | 18,33 | 13,67 | 3,00 | 6,255* |
| Private rental stock | 20,5 | 14,0 | 20,33 | 19,50 | 0,379 |

(*): p<0,10; *: p<0,05; **: p < 0,01; ***: p < 0,001.

**Table 3.** Means of cluster variables referring to housing outcomes and of criterion variables, 2012

| Clusters | Cluster 1 NO, SE, NL, DK | Cluster 2 FI, UK, AT, DE | Cluster 3 BE, FR, IE, PT, ES | Cluster 4 GR, IT | ANOVA F-test |
|---|---|---|---|---|---|
| *Cluster variables* | | | | | |
| Affordability problems young owners | 9,78 | 11,22 | 27,32 | 11,98 | 11,427** |
| Housing cost burden young owners | 11,09 | 31,79 | 53,18 | 67,73 | 17,681*** |
| Housing conditions young owners | 0,29 | 0,29 | 0,35 | 0,67 | 9,540** |
| Affordability problems young renters | 51,19 | 46,00 | 41,57 | 52,56 | 0,605 |
| Housing cost burden young renters | 23,92 | 38,52 | 58,57 | 79,81 | 19,163*** |
| Housing conditions young renters | 0,55 | 0,58 | 0,62 | 0,94 | 2,994(*) |
| Outright homeownership young | 12,75 | 33,99 | 42,31 | 75,60 | 32,193*** |
| Affordability problems elderly owners | 5,12 | 2,08 | 1,67 | 1,69 | 0,966 |
| Housing cost burden elderly owners | 4,85 | 17,34 | 37,44 | 60,31 | 13,197** |
| Housing conditions elderly owners | 0,13 | 0,17 | 0,32 | 0,53 | 16,849*** |
| Affordability problems elderly renters | 62,73 | 47,12 | 30,10 | 55,19 | 3,248(*) |
| Housing cost burden elderly renters | 11,31 | 30,21 | 47,37 | 84,86 | 21,986*** |
| Housing conditions elderly renters | 0,18 | 0,35 | 0,55 | 0,76 | 6,988** |
| Outright homeownership elderly | 50,37 | 87,87 | 94,97 | 95,74 | 32,777*** |
| *Criterion variables* | | | | | |
| GDP per capita (US$ PPP, 2005) | 37803,50 | 33806,00 | 29253,40 | 23562,00 | 3,981* |
| Residential Mortgage Debt/GDP | 89,90 | 49,48 | 59,46 | 30,9 | 6,229* |
| Social rental stock | 18,30 | 15,40 | 7,60 | 2,65 | 2,418 |
| Private rental stock | 17,00 | 25,15 | 17,66 | 16,80 | 0,532 |

(*): p<0,10; *: p<0,05; **: p < 0,01; ***: p < 0,001.

## Figures

**Figure 1.** Configurations of housing outcomes, dendrogram 1995

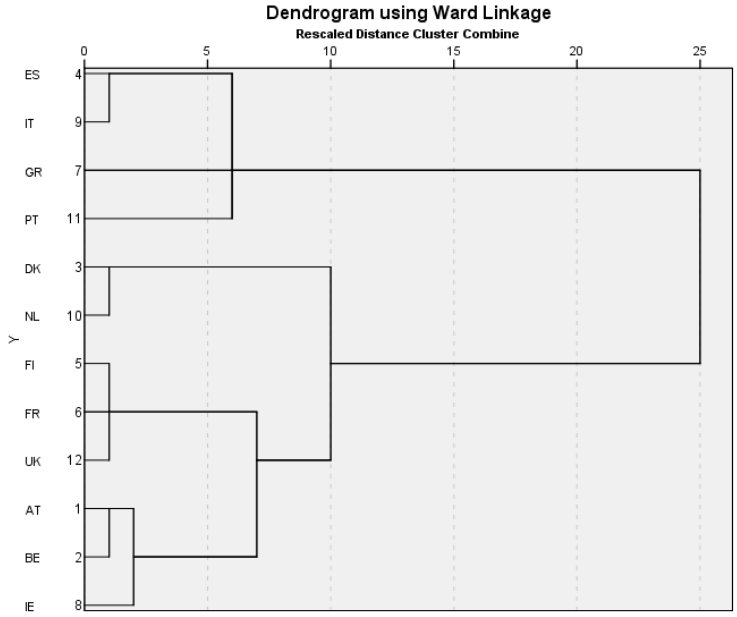


**Figure 2.** Configuration of housing outcomes, dendrogram 2012