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Christian Lennartz, Rowan Arundel and Richard Ronald

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Young People and Homeownership in Europe through the Global Financial Crisis

Christian Lennartz, Rowan Arundel and Richard Ronald

Abstract

In context of poorly performing national economies and sustained employment insecurity since the Global Financial Crisis of 2007-2008, various UK and US studies have suggested that access for younger people to independent living, and to owner-occupied housing in particular, has been in decline. Testing the wider validity of these findings, this paper uses cross-sectional data to deconstruct how and why pre to post-crisis changes in housing consumption patterns among 18-34 year olds have varied across the EU 15 countries. Our results indicate a common trend towards diminishing access to home purchase among younger people. However, the extent of decreasing homeownership rates, as well as whether the rental sector or the parental home are used as alternative housing routes depends on the country context. The paper suggests that rather than being the direct outcome of economic recession and labour market contraction at the country level, post-crisis declines in young-age property ownership is primarily associated with housing systems, especially those most affected by shifting mortgage-credit access, and could thus be interpreted as a constituent of the volatile nature of more market-types residential capitalism.

1 Introduction

The rise of homeownership has been one of the most remarkable social transformations in advanced economies in recent decades (see Aalbers, 2008; Ronald & Elsinga, 2011; Schwartz & Seabrooke, 2008;). In many contexts it has become a ‘key symbolic marker of membership in society’ (Hirayama 2012, p. 173) and an ever more important source for the economic wellbeing for private households (Ansell, 2012). Access to the owner-occupied sector has, however, become increasingly difficult for many people, among which younger adult age cohorts appear to be particularly disadvantaged. Continued high house prices, precarious employment situations, decreasing real incomes, prolonged education, new patterns of family formation and above all more restricted credit access have become considerable barriers for many younger people in accessing a ‘housing ladder’ towards owner-occupancy (Andrew, 2012; Fisher & Gervais, 2011; Forrest & Yip, 2012). Within what has been described as the liberal ‘homeowner societies’ (Ronald, 2008), policy makers, the media, and researchers have labelled younger adults ‘generation rent’ (see McKee, 2012), ‘failure to launch households’ (Mykyta, 2012), ‘boomerang kids’ (Kaplan, 2009), or even

‘parasite singles,’ (see Ronald and Hirayama, 2009), all connoting the failure of younger adults in starting an independent life and buying a house at a relatively early life stage.

While the problems faced by younger people in entering the housing market, and in particular their growing inability to access homeownership, are not new phenomena, it has become increasingly evident that their housing positions have worsened in the lead up to, and through the Global Financial Crisis (GFC). Recent research in the US (Dunne, 2012; Mykata, 2013; Mykyta & Macartney, 2011) and in the UK (Clapham et al., 2010) has illustrated how weak economies, rising unemployment among young adults, less generous social benefits, uncertainty about housing markets, and stagnant building activities have impeded access to independent living. Add to this the implementation of more stringent lending criteria by financial institutions and it becomes clear that the opportunities for younger adults to become owner-occupiers have likely decreased substantially in the post-crisis period (see also Forrest & Yip, 2012).

However, the empirical evidence for this claim is largely based on the experiences of liberal economies, the US and the UK in particular, while relatively little is known about the housing outcomes of younger people in other national contexts. This is problematic in the sense that countries have performed differently after 2008 in terms of economic growth, labour market figures, and housing production, as well as how governments have responded to the crisis. It could be assumed, therefore, that the story of increasing barriers to homeownership access is not necessarily a universal one and it is quite likely that we are able to observe some variation in how the housing outcomes of younger people have changed across advanced economies since the late 2000s. We would further argue that if variegated housing access is apparent across different countries, this leads to the questions of whether specific patterns of change can be found and why countries show similar developments among younger adults’ housing trajectories following the financial crisis.

This paper seeks to address this shortcoming in both the housing literature on homeownership in the GFC and socio-demographic studies on the housing biographies of younger adults by addressing the following research questions. First, what changes have occurred in access to homeownership for younger adults across Europe in the pre to post-crisis period? Is there a converging post-crisis path, or do (clusters of) countries follow diverging routes? Second, how can the changes in housing outcomes of young people be explained, and do diverging housing outcomes across countries coincide with similar crisis experiences?

Three further clarifications are necessary. First, we define younger households as households with a head aged 18 to 34, and all independent younger adults as those who are not living in the parental home. This aligns with statistical measures used in cross European data. Second, we focus on EU 15 countries, thus excluding non-European advanced economies and the Eastern European transition economies. Third, although homeownership access after the GFC is particularly revealing – providing insights on the relationships between housing and other socioeconomic dimensions – it is not helpful to study it in isolation but should be considered in the context of alternative (voluntary or involuntary) housing trajectories of younger households – including the possibilities of prolonged co-residence and moving into rental/rent free accommodation – this study seeks to map whether the aftermath of the crisis is really a story of a pure homeownership crisis in Europe, or whether it is a wider housing market crisis that affects (potential) young homeowners and renters alike. As such, this paper is an exploratory empirical study into the shifts in housing consumption patterns of younger adults in the old European Union member states through the Global Financial Crisis.

The paper proceeds as follows. The following section will clarify the determining factors of younger adults' housing trajectories, focusing on how and why consumption patterns and decisions vary significantly between countries. Hereafter, we will explain the empirical approach and variables being used, followed by the presentation of the research results. The paper will conclude with a discussion of its main findings and deliberate on the key insights into current trends in young people's housing outcomes and what might be driving divergent developments across European countries over this recent period of economic recession.

2 The Context of Housing Pathways Transformations

In understanding of shifting owner-occupied housing access among younger adults, our analysis of the literature proceeds in two parts. The first seeks to clarify why homeownership at a younger age should be considered as a property of a wider process of evaluating different living arrangement options – including the decision to first initiate independence – and how these options vary between countries due to systemic and cultural divergences. The second part seeks to elucidate how general economic downturns surrounding the GFC may have affected these choices in the housing market and how differences between countries in their crisis experiences may have led to different choices

on an aggregate level. From this we will derive several assumptions for the empirical analysis.

Homeownership, home-leaving and tenure choice

The period of young adulthood is a key life stage that potentially combines several demographic events that are associated with the transition into a more or less independent life. It is here that individuals make decisions on leaving the parental home, employment, continuing education, family formation, as well as where and in what type of accommodation they want to live. Ample research has shown that these events are interrelated, where one decision may increase (or decrease) the likelihood of another (Beer and Faulkner, 2011; Rindfuss, 1991). The timing of home-leaving typically influences housing outcomes (see Buchmann & Kriesi, 2011; Clark & Mulder, 2002), meaning those who postpone nest leaving are in a better position to enter the homeownership market as the first destination, since they have had more time to build up resources necessary for home purchase. At the same time, the affordability and availability of housing directly affects the timing decision. Where housing is scarce and entering homeownership costly, younger adults are likely to stay longer in the parental home or move to rented accommodation.

Transitions into both independent living and homeownership are shaped by individual preferences for specific living arrangements and the relative perceived benefits of co-residence, renting and owning. Whether one is able to act on the desire to start an independent household or to buy a dwelling is primarily a question of the individual's micro-level resources – including, *inter alia*, household income, employment position, job security, parental wealth – to be able to cover monthly rent or mortgage payments, and existing macro-level constraints in the aforementioned availability and costs of housing consumption (Aassve et al., 2002; Clarke & Huang, 2002; Di Salvo & Ermisch, 1997; Lersch & Dewilde, 2013).

The availability of micro-level resources and the existence of macro-level constraints vary significantly across country contexts. Considering the variegations in housing system constraints, accessing homeownership as a first destination or at least at an early stage in adulthood has been shown to be strongly associated with the availability of easy and cheap mortgage credit. In countries where younger adults can almost fully borrow against the value of their future property, one can indeed find disproportionately high homeownership

rates of the younger age cohort. This is the case, for instance, in the Netherlands, Denmark and to a smaller extent the UK (Mulder & Billari, 2010; Schwartz, 2013). On the other hand, in Southern Europe a combination of high-level home-ownership, limited access to mortgages, and high house prices seems to make it particularly difficult for young people to form their own households without substantial family assistance (Mulder, 2006; Castles & Ferrara, 1996). Or in the terminology of Schwartz and Seabrook (2008), there are varying types of ‘residential capitalism’ that shape the opportunities for younger people in using the owner-occupied sector as their first destination as an independent household.

Whether property ownership is indeed the most desired form of independent living among younger people is also a function of rental housing markets. Kemeny’s theory of dual and unitary rental systems (Kemeny, 1995) is a helpful starting point in understanding how countries may vary in this regard. In the former, a marginalized affordable rental sector serves only the most vulnerable households, pushing younger adults into other living arrangements, often prolonged co-residence. Southern European, Atlantic-English Speaking, as well as Central and Eastern European countries are examples of this model. Where there is a wider range of rental housing options, which is more typical of unitary rental markets in Northern (particularly Sweden) and most Continental European countries (particularly Germany, Austria, and the Netherlands), we can see that young adults tend to leave the nest sooner rather than later and that the rental rather than the owner-occupied sector is the most important first destination after the natal home (Mandic, 2008). However, recent studies (e.g. Lennartz, 2013) have suggested that the unitary rental model has come under severe pressure in many countries, making younger people’s moves into the sector more complicated.

Of course, housing availability and affordability are not the only factors that impact timing and tenure choice across countries. Ample studies have shown that labour market systems, cultural differences, family relations, and demographic variations play key roles as well. First, Lersch and Dewilde (2013) have recently shown that the widely acknowledged negative effect of a precarious labour market position at the individual level on homeownership access is amplified in countries with more marketized housing provision systems, while the effect is smaller in countries where family support networks are relatively strong. Second, there is a strong preference for prolonged intergenerational co-residence in Southern and Eastern European countries, especially among parents (Iacovou, 2010). Third, Mulder and Wagner (2001) demonstrate that a high social acceptance of cohabitation between non-married couples, which is more often the case in non-Catholic countries, is

more associated with rental housing consumption, while homeownership is more often the first destination where home-leaving coincides with marriage – certainly, the causality may run the other way around, since the inaccessibility of the housing market can delay such events. Fourth, societal pressures exist on what is considered an acceptable age for home-leaving (the timing decision) and thus transport into the decision on whether to buy or to rent (Aassve et al., 2013). Furthermore, the availability of family resources and the parents' willingness to support the early steps of their children's independent lives through financial transfers have a strong influence on home-leaving and tenure choice. In Southern and Eastern Europe it is more common to assist the younger generation through co-residence only, while in Northern and particularly Western European countries financial transfers are common practices of supporting independent living be it through help with rent expenses or mortgage costs/deposits (Kohli & Albertini, 2008; Isengard & Szydlik, 2012).

Comparing the different housing options available to younger adults, homeownership can potentially be described as the ultimate form of moving to independence. Indeed, expectations of an early transition into owner-occupation has become increasingly normative across a wider number of societies and can be associated with housing system as well as broader socioeconomic transformations in recent decades (see Forrest and Yip, 2012). Homeownership means that younger adults are managing an asset, and typically a debt, which makes moving back with parents more unlikely because of high opportunity costs. In the same vein, house purchase often coincides with marriage and family formation, which are another two key adult life transitions.

Accordingly, it appears that some of the literature is making the (implicit) assumption that complete independence and full citizenship can only be obtained through property ownership. However, the transition into adulthood is very well possible in both the parental home and certainly in rental accommodation, in contexts where permanent non-marital cohabitation and having children are common and socially accepted (Billari & Tabellini, 2010). Furthermore, home purchase at a young age may undermine the flexibility of younger adults in adjusting their biographies. If they decide to accumulate more human capital (e.g. by pursuing another study), the high costs of homeownership might impair their abilities to actually do so. Homeownership may also impede the capacity of a younger household to change job or relocate to a different labour market (Oswald, 1999).

If prolonged co-residence, moving back in with parents, and temporary renting are completely adequate alternatives and might even be advantageous under certain

circumstances, why then should we be concerned about decreasing homeownership access for younger households after all? Well, on the one hand, even though the actions of existing owners drive the ownership market in periods of high house price appreciation, the actions of first-time buyers may be crucial in housing market depressions (Meen, 2013). First-time buyers sustain capital circulation in the market as they create liquidity at the lower end, which eventually flows through the entire owner-occupied sector, thus helping it out of a recession (Neuteboom & Brounen, 2011). On the other hand, with housing property being the most important source of individual wealth and in the face of diminishing pension reserves and welfare alternatives delayed homeownership access may have negative long-term effects on younger adults' economic wellbeing over the life-course. An increasingly explicit assumption in policy making has been, especially in Europe and the US, that the majority of households accumulate a large asset during the course of their working years (in the form of an inevitably un-mortgaged home), which can be tapped to support consumption in later life (Ansell, 2012; Crouch, 2009), or will at least reduce the chances of poverty in old age (Dewilde & Raeymaeckers, 2008; Doling & Ronald, 2010). Assessing the impact of the crisis on flows of younger adults into homeownership thus appears to be crucial.

Housing trajectories of younger households and the crisis

Younger households have been facing a more complex housing market environment since long before the crisis. Lower real incomes, more unstable labour markets, more precarious employment conditions, reduced (social) housing supply and higher mortgage deposit requirements have made home-leaving in general and access to homeownership in particular burdensome if not impossible for many younger adults. Forrest and Yip (2012) note that the post-fordist and post-industrial model has increased the complexities and unpredictability in the transition from youth to adulthood. "Yo-Yo transitions" become more common with false starts and semi-dependency being regular pathways, while stable transitions into homeownership are increasingly improbable (see also Forrest & Hirayama, 2009).

The housing opportunities of younger people typically deteriorate in an economic crisis, with its negative impact on labour markets, economic stability, housing supply, and credit accessibility. However, there is a surprising lack of research on how exactly young adults respond to economic stress with regard to their decisions on home-leaving and tenure

choice. Most recent research on the effect of the GFC on the housing outcomes of younger people points towards a strong negative effect on home-leaving opportunities (Dunne, 2012; Mykyta, 2012). On the other hand, the literature does not give guidance as to whether adverse economic conditions are more likely to harm the demand for rental housing or owner-occupied housing. Since younger households are more likely to rent before owning – an assumption that is not universally true but dependent on the country context – a larger depressive effect on the demand for rental housing in an economic downturn could be expected (see Lee & Painter, 2013).

A possible coping mechanism (that is difficult to investigate due to the absence of statistical data) is the possibility of doubling-up resources with non-relatives rather than parents or other family members. Mykyta and Macartney (2011) show for the US, that in line with popular media reports there is a statistically significant increase in both co-residence and non-family household arrangements. Here, we should be aware that such ‘unusual’ living arrangements are not necessarily a product of the current crisis but have become a popular ‘rite of passage’ for young people (McNamara & Connell, 2007) and should be more appropriately viewed as often an active choice for young adults (Kenyon & Heath, 2001) rather than in the context of a constraints model.

Figure 1: Tenure choice and home-leaving in the crisis period – a conceptual model



Building on current understandings of the course of early housing careers in different country contexts and how they are being reshaped by recent ruptures in socioeconomic conditions, an analysis was carried out that sought to both examine and, to a more limited extent, explain differences between EU 15 countries. Figure One conceptualizes the predicted findings for the empirical analysis. Given that the GFC has affected all Northern and Southern European countries, we expect to find higher co-residence rates in almost all countries in the post-crisis period. Whether this is at the expense of homeownership rates or rental housing is related to country context. However, if the ‘generation rent’ narrative

from the UK really stands as an example of post-crisis housing trajectories of younger households, we can expect to find falling homeownership rates and a growing importance of the rental sector. Certainly, one could also follow Lee and Painter's (2013) argument that as the major first destination of independent living, the crisis will affect the rental sector more severely. Nonetheless, we stick to the first assumption, but the empirical research on this matter should be regarded as exploratory. Secondly, assuming a direct relationship between the depth and durability of the crisis and changing housing trajectories, we expect stronger increases in the share of co-residence of young adults with parents and larger drops in homeownership rates among younger cohorts in countries that have been hit hardest by the economic crisis. Thirdly, we will analyse the possible influence of housing systemic variegations as described above on pre to post-crisis change, but will abstain from hypothesis formulation and follow the exploratory nature of the study. An investigation into the issue of whether shared living among non-related individuals is indeed used as a crisis coping mechanism in Europe is certainly of interest, yet cannot be undertaken in this study.

3 Data and analytical approach

Data source

The EU Statistics on Income and Living Conditions (EU-SILC) from Eurostat was the primary data set used for the analyses. EU-SILC¹ was started in 2003 and was extended to the EU25 countries after 2005. The sample size of the cross-sectional survey is roughly 130,000 households or 270,000 individuals aged 16 and over with the reference population including all private households residing in the territory while generally excluding persons living in collective institutions (Eurostat, 2013a). Our analysis included the original EU15 countries with the exception of Ireland, where data was not available in recent years. It was decided to focus on North, South and West European countries and leave Eastern European countries out of the analysis. The member states that joined the European Union since 2004 are still to be considered as transition economies, in which housing markets function completely differently (e.g. super high homeownership rates) and are still much

¹ EU-SILC surveys are collected by each member state on the basis of a common 'framework' monitored by Eurostat to ensure comparability of the classifications and data collected (Eurostat, 2013b).

more volatile², making the interpretation of the empirical data much more complex. Given that this study is not necessarily interested in the changes across the entire European Union but wants to examine whether the purported system shift in the UK holds in other European countries as well, we are confident to have enough variation in the data even when using this smaller set of countries.

Approach – cluster analysis

In an attempt to look at how different EU cases have experienced changes in post-crisis housing trajectories for younger people, a cluster analysis was performed to group these countries based on common pathways. A cluster analysis is a multivariate statistical procedure, which categorizes cases based on the minimization of within group similarities and maximization of between group differences. The Ward's method, a hierarchical agglomerative clustering approach, was selected as it is appropriate for smaller samples of cases and does not require predetermination of the number of groups, which is of crucial importance for the exploratory nature of this study. The procedure uses an analysis of variance with squared Euclidean distances to evaluate dissimilarity between clusters. The actual number of clusters is not prescribed by the method. Initially each case is considered a cluster in its own, which is followed by the sequential merging of similar cases. A tree diagram (dendrogram) visualizes the clustering procedure, allowing for the number of clusters to be reproduced by the reader.

Variables

The main housing variables of interest were the tenure categories of respondents. Because of some variations in the way the question was asked between years and countries, this needed to be simplified to three categories for comparability: 'homeowner' (including outright owners and mortgage holders), 'rental housing' (including market and sub-market rent), and a third category of 'accommodation provided for free.' It was also possible to calculate when individuals in our age category were listed as living with one or more parents, which became the variable of 'co-residence'. The percentage point changes in these mutually exclusive categories were used to compute the clusters of changing housing trajectories. In analysing pre and post crisis changes, the comparison was made between

² Our analysis of changing housing trajectories showed homeownership rate changes dramatically higher than in other EU countries, such as in Poland where among older cohorts (35 to 55) there were increases of + 17 percent in the post-crisis period, while Lithuania had average year on year changes of about 5 percent.

2007 to 2011 data years, the former being a snapshot before the crisis hit the examined countries and the latter being the most recent dataset available representing the conditions after the crisis and during this period of on-going economic recession.

A general problem with the cross-sectional EU SILC dataset is that we cannot determine the previous type of accommodation of the respondents, meaning that there is no question on their housing biographies. This implies that we do not know whether a current homeowner is a first-time owner, which would ideally distinguish between rental housing and the parental home as previous living arrangement, or whether the respondent has been an owner before. This results in the use of homeownership (rental housing, etc.) rates rather than a more precise measure of homeownership entrance. In the same vein, the data does not allow for the separation of individuals who have never left versus those who have returned ('boomerang kids') to the parental home. Moreover, this study would ideally distinguish between the social and the private rental sector as potential destinations for nest-leavers and those dropping out of homeownership, since the conditions of renting in these sectors vary substantially (price levels, property rights, security of tenure, etc.). What this means is that due to data constraints this study can only provide a simplified account of changing housing trajectories, thereby necessarily abstracting from certain complexities in younger adults' housing biographies in the post-crisis period.

4 Results

Changing homeownership patterns among younger adults in the EU 15

The data in Table One clearly show an emerging pattern of decreasing homeownership rates among younger adults in the EU 15 in the post-crisis period 2007 to 2011. Apparently, this has not been a favourable period for younger people who aspire to become homeowners and most likely for those who had entered the sector already. Supporting the popular discourse apparent in the UK media, the country has by far the highest decrease in the homeownership rate among 18-34 year olds (-10.2 %). A larger group of countries, including all Southern European nations, Austria, Luxemburg, and most Northern European countries show a substantial decline of the owner-occupied sector as well – in particular Denmark at -7.6% – whereas, on the other hand, Germany, France, Belgium, and Finland have relatively stable homeownership rates among the younger age cohort. In short, there is an important trend in decreasing homeownership across the EU 15; yet, strong

variations exist in the extent to which owner-occupation rates have shifted during the crisis period.

One important observation is that these country variations are neither associated with the absolute size of the homeownership sector within each country nor with how ownership rates changed in the period 2005 to 2007. First, it is true that the three countries with the largest shares of homeownership among 18-34 year olds, Sweden, the Netherlands, and Denmark, have some of the strongest percentage point decreases between 2007 and 2011. However, other countries with above average homeownership levels (Finland and Spain) have relatively stable post-crisis rates, while Germany and Austria, the two countries with the smallest owner-occupation shares have strongly diverging post-crisis outcomes. Second, it becomes quite obvious that the depression period is not simply the continuation of pre-crisis trends. In almost all countries – with the exception of Germany, Belgium and Portugal – there has been a turn for the worse, with the most obvious crisis impact in the UK, Denmark, the Netherlands and particularly Sweden, where strong pre-crisis increases have been completely reversed in the four years following the GFC. In a similar vein, the stable situation in Finland appears to be less favourable given it had the strongest increase in young adult homeownership prior to 2007.

A more precise account of who is affected most by the crisis and the particular disadvantage faced by younger cohorts can be obtained when changes in the share of homeowners among the younger age group are compared to changes of middle-aged residents. The middle-age group, represented by all 35 to 55 year olds who are registered as the head of household, does comparably well in the post-crisis period, meaning that homeownership rates are relatively stable or even increasing in a majority of countries – the UK, Belgium, and particularly Luxemburg are the exceptions here. What the comparison of different age groups across countries signifies is the higher vulnerability of younger people to external economic shocks through, *inter alia*, less stable labour market positions or the increased exposure to mortgage repayment defaults.

Table 1: Housing outcome changes among younger adults in EU 15* countries between 2007 and 2011

	Homeownership rate among independent 18-34 year olds				Rental housing rate among independent 18-34 year olds		Free accommodation among independent 18-34 year olds		Co-residence among 18-34 year olds		Homeownership rate among 35-55 year olds	
	2007	2011	<i>change 2007-2011</i>	<i>change 2005-2007</i>	2007	<i>change 2007-2011</i>	2007	<i>change 2007-2011</i>	2007	<i>change 2007-2011</i>	2007	<i>change 2007-2011</i>
Finland	36.67%	37.04%	0.37%	5.52%	42.79%	0.42%	0.56%	0.46%	19.98%	-1.25%	74.10%	1.36%
Germany	14.11%	14.41%	0.30%	-2.45%	43.07%	1.76%	2.12%	-0.24%	40.70%	-1.82%	54.37%	-1,15%
France	24.04%	24.12%	0.09%	0.58%	45.80%	-5.02%	3.74%	0.38%	26.42%	4.55%	62.75%	0.05%
Belgium	31.51%	31.44%	-0.07%	-3.56%	28.80%	-0.62%	1.24%	0.40%	38.44%	0.27%	72.28%	- 2,36%
Spain	33.19%	31.26%	-1.93%	1.24%	8.55%	3.50%	4.17%	-0.13%	54.10%	-1.45%	74.70%	-1.73%
Portugal	27.55%	25.24%	-2.31%	-2.43%	9.67%	1.87%	6.41%	-1.80%	56.38%	2.25%	69.09%	1.59%
Italy	22.77%	20.32%	-2.45%	0.13%	12.36%	1.79%	8.13%	-0.06%	56.73%	0.71%	63.65%	-0.99%
Greece	20.03%	16.65%	-3.38%	0.77%	18.73%	3.21%	4.33%	-0.12%	56.91%	0.29%	64.21%	0.91%
Austria	19.62%	15.51%	-4.10%	-1.98%	33.51%	3.25%	2.78%	-0.21%	44.09%	1.06%	56.95%	1,26%
Luxembourg	29.08%	24.48%	-4.60%	1.93%	24.55%	2.84%	3.06%	-1.23%	43.31%	2.98%	72.24%	-8.46%
Sweden	41.99%	36.85%	-5.14%	5.30%	41.27%	-0.39%	0.00%	0.00%	16.21%	6.02%	72.73%	1.46%
Netherlands	40.05%	34.67%	-5.39%	1.62%	29.90%	3.36%	0.29%	0.46%	29.76%	1.51%	71.39%	1.36%
Denmark	38.93%	31.34%	-7.60%	-0.08%	46.99%	3.98%	0.00%	0.09%	14.08%	2.62%	72.98%	-0,25%
UK	33.45%	23.26%	-10.18%	-0.49%	25.85%	8.63%	0.82%	0.06%	39.89%	1.49%	74.79%	-5.06%
EU15*	29.50%	26.19%	-3.31%	0.44%	29.42%	2.04%	2.69%	-0.14%	38.36%	1.37%	68.30%	-0.01%

* EU 15 includes all countries listed in above table. Ireland is excluded for reasons of data reliability.

Data Source: Eurostat. EU statistics on income and living conditions (EU-SILC), 2007-2011

Clusters of changing housing trajectories

As described previously, decreases in homeownership that correspond with increases in the share of younger adults living with their parents could indicate a housing market environment in which home-leaving and thus the start of an independent household are generally being delayed. Conversely, where changing homeownership rates are matched by changes in the rental tenure category, opportunities for home-leaving do exist but are not realized through buying a house. A glance at the general developments in the rental housing sector and co-residence reveals that the financial crisis in Europe is associated primarily with a tenure shift to the rental sector rather than deterred home-leaving in general, suggesting a homeownership crisis rather than surmounting constraints for younger adults across the entire housing market. This outcome stands in opposition to the wider literature on younger adults' housing trajectories (see above) and specifically the recent studies of Mykita (2012) as well as Lee and Painter (2013), who found a larger negative crisis effect on home-leaving opportunities and rental housing consumption respectively than on homeownership access.

Integrating the mutually exclusive tenure categories of homeownership, rental housing, rent free accommodation, and co-residence among 18-34 year olds between 2007 and 2011 into the Ward's cluster analysis reveals the complexities behind these developments and allows for the recognition of distinctive and similar constellations across the 14 countries. The first cluster consists of all four Southern European countries and Austria (see Figure 2). It is marked by moderate (Spain) to relatively high (Austria) decreases in homeownership, substantially growing rental housing sectors – particularly if we take into consideration that the rental sector has played only a marginal role for younger adults in Southern Europe before the crisis – and a relatively constant share of younger adults living in the parental home, with Portugal and Spain as minor and contrasting exceptions. It is this last cluster characteristic that is particularly intriguing. Given the traditional Southern European model of prolonged co-residence with a successive direct move into homeownership (Poggio, 2008), one might have expected clear signs of delayed home-leaving. One explanation might be that given the very high absolute co-residence levels in these countries, there is arguably a saturation effect, meaning that younger adults who can stay in the parental home already do so.

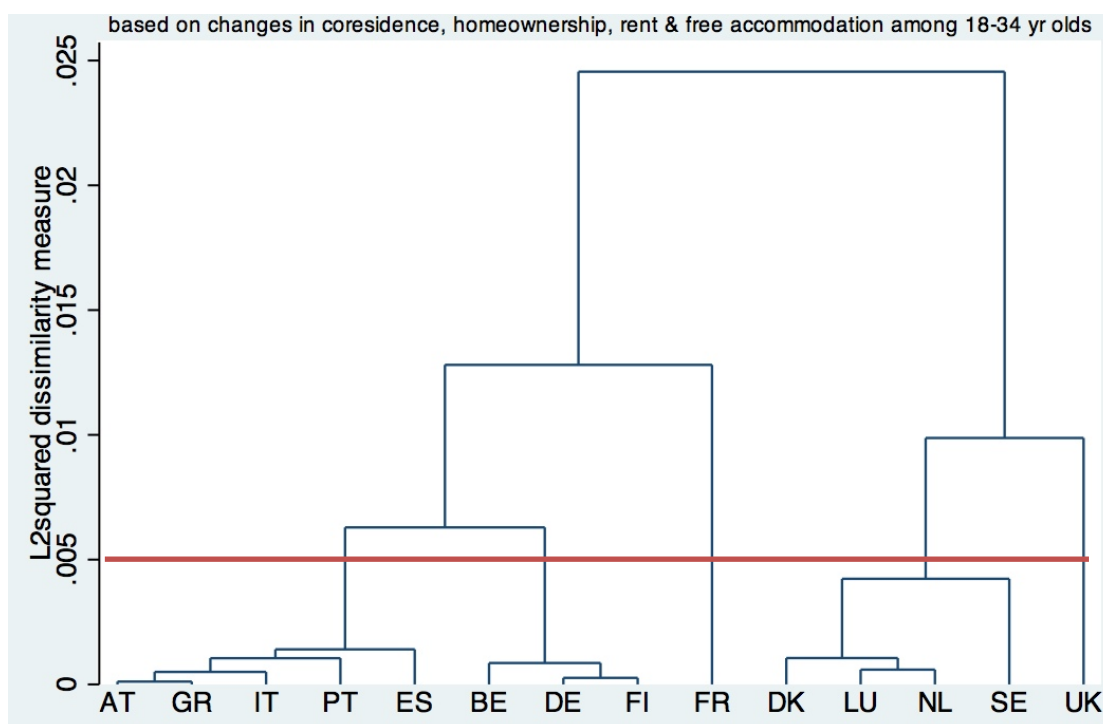
The second cluster comprises a relatively dissimilar triad of countries, with Germany as a 'large rental sector' system, Finland as a typical example of early home-leaving in the

Nordic countries, and Belgium with no pronounced housing trajectory model. Nevertheless, in their post-crisis development they are similar in that little change has taken place, arguably with the exception of a more substantial decline in the co-residence level in Germany. France could be seen as part of this cluster if homeownership was considered in isolation. However, the large decline in rental housing and simultaneous increase in co-residence sets it apart from not only the ‘no-change cluster’ but also all other EU 15 countries, making it a case of its own in the cluster results.

The third cluster is first and foremost a case of rapidly declining homeownership sectors, with simultaneously increasing rental housing and co-residence rates. Sweden has taken a slightly different path in this regard, as the decline in homeownership has been taken up completely by an increase of the ‘living with parents’ category. Interestingly enough, cluster three comprises three countries (Sweden, Denmark, and the Netherlands) that are marked by relatively high homeownership rates, early home-leaving and highly accessible rental sectors, albeit less so in the Netherlands, and Luxemburg as a case that has no marked traits of younger adults living arrangements and is close to the European average. The UK largely follows the outcomes in cluster 3 but takes them to the extreme with a dramatic fall in homeownership levels among 18 to 34 year olds, matched by an immense growth of the rental housing sector.

Two main conclusions can be drawn from the cluster analysis. First, the discourse on the housing trajectories of younger adults (‘generation rent’, ‘failure to launch’) that has been prominent in the UK media and literature does not find reverberation across European countries. Whether the UK is just a very extreme case or even an outlier is a matter of interpretation, but it appears reasonable to say that there is no evidence for a common trend where the rest of Europe follows the UK pattern. Second, the composition of countries within each of the three clusters suggests that system traits appear to be an insufficient predictor of the shifts in younger adults’ housing outcome in the economic crisis period. As a result, in a following step we seek to examine whether the different crisis experiences of the EU 15 countries can explain how they cluster around housing trajectory changes.

Figure 2: Dendrogram of the cluster analysis, using the ward method



Changing housing outcomes and macroeconomic/housing market developments

Six variables were selected to assess how the crisis impacts the living conditions of younger adults in Europe and could lead to diverging housing outcomes with regard to homeownership, co-residence, or the consumption of rental housing. All six measures are based on country-level aggregates published by Eurostat and the European Mortgage Federation. First, aggregate developments in unemployment are measured by 2007 to 2011 percentage point change in *harmonized unemployment rate among younger adults between 15 and 39 years*. Countries/clusters with higher spikes of younger adult unemployment rates should have larger drops in homeownership rates and higher increases in co-residence rates (Billari & Tabellini, 2010). Second, *average year-on-year GDP growth for the years 2010 and 2011* should be understood as a measure of the general economic situation and accordingly the confidence that younger people have in their own economic prospects. The willingness and ability to invest into property is most likely lower where economic performance is persistently weak (Neuteboom & Brounen, 2011). Pre to post-crisis changes in education enrolment rates is another general crisis indicator – prolonged education participation is often used as a strategy to avoid unemployment – and at the same time also measures the ability to access homeownership; younger adults who are in education are less likely to have

the means to pay for a mortgage, increasing the likelihood of living in the parental home or possibly in rental accommodation, depending on a country's housing and education system (Andrew, 2010).

Furthermore, two housing market crisis indicators are used. On the one hand, changes in *year-on-year housing completions* illustrate the general condition of the housing market as well as developments in housing availability (both homeownership and rental housing) for younger adults. The assumption is that the higher the drop in housing completions, the higher the likelihood of decreasing homeownership rates and the larger the increase in co-residence rates. On the other hand, *year-on-year house price changes* are compared for the 2005-2007 pre-crisis and the 2009-2011 post-crisis period. The assumption is that the higher the drop in average house prices the more likely are younger adults to meet housing costs. However, dramatically falling house prices can undermine confidence in the housing market and lead to a lower willingness to invest in property. Additionally, house price deflation/busts are often followed by stricter lending criteria, including higher deposit requirements. There is thus no coercive relation running from lower prices to higher ownership rates among the younger generation. To account for this, *mortgage debt to GDP (%)* in 2007 is used as a proxy for mortgage accessibility. It indicates which countries applied lenient lending criteria before the crisis and have been more likely to tighten requirements afterwards (Aalbers, 2008; Schelkle, 2012).

Table 2: Clusters of housing change and economic/housing market indicators

	Harmonized unemployment rate 15-39 year olds, change 2007- 2011* (%)	Average GDP growth 2010/2011* (%)	Change in education enrolment rate – pre- to post-crisis avg. (%)	House price change, 2005-2007/2009-2011 avg.** (%)	Housing completions, changes pre- to post-crisis avg.** (%)	Mortgage debt to GDP %, 2007** ^a (%)
Austria	0.0	2.3	2.8	-0.2	9.6	24.0
Greece	12.3	-6.0	3.0	-14.6	-61.6	30.5
Italy	3.5	1.1	2.0	-7.2	-34.8	17.5
Portugal	5.3	0.3	2.9	-1.2	-40.4	59.7
Spain	15.2	-0.1	4.3	-14.4	-65.3	61.4
<i>Cluster 1</i>	<i>7.3 (SD=6.3)</i>	<i>-0.5 (SD=3.2)</i>	<i>3.0 (SD=0.8)</i>	<i>-7.5 (SD=6.9)</i>	<i>-38.5 (SD=29.9)</i>	<i>38.6 (SD=20.5)</i>
Belgium	1.4	2.5	2.2	-13.7	-18.2	37.7
Germany	-2.3	3.7	-5.8	-0.7	-29.6	47.6
Finland	1.6	3.1	1.9	-2.7	-18.0	34.3
<i>Cluster 2</i>	<i>0.2 (SD=2.2)</i>	<i>3.1 (SD=0.6)</i>	<i>-0.6 (SD=4.5)</i>	<i>-5.7 (SD=7.0)</i>	<i>-21.9 (SD=6.6)</i>	<i>39.9 (SD=6.9)</i>
Denmark	4.7	1.4	-0.6	-16.4	-62.2	92.9
Luxemburg	-0.2	2.5	6.2	-3.3	6.8	39.1
Netherlands	1.5	1.2	5.1	-7.1	-25.5	97.8
Sweden	1.6	4.8	-0.2	-7.2	-34.0	65.5
<i>Cluster 3</i>	<i>1.9 (SD=2.0)</i>	<i>2.5 (SD=1.7)</i>	<i>2.6 (SD=3.5)</i>	<i>-8.5 (SD=5.6)</i>	<i>-28.7 (SD=28.4)</i>	<i>73.8 (SD=27.2)</i>
UK	4.3	1.4	4.2	-8.1	-36.4	85.0
France	1.6	1.9	-1.4	-7.6	-19.6 ¹	34.6

Sources: * Eurostat, 2013, ** EMF, 2012

¹) Housing starts

^a) A one-way ANOVA was performed for all six macro indicators. The differences in the means of the three clusters were statistically significant only for ‘Mortgage debt to GDP’ at $p < 0.05$. If Austria and Luxemburg are considered as outliers in Cluster 1 and Cluster 3 respectively and thus excluded from the analysis, then ‘average unemployment rate’ became significant at $p < 0.05$ and ‘average GDP growth’ became marginally significant at $p = 0.07$.

Table Two shows the individual country and cluster outcomes for each of the six variables. A first observation is that countries do have diverging crisis experiences within Cluster 1 and Cluster 3 (as indicated by the standard deviation). Particularly in Cluster 1 the economic and housing market performance of Austria is in complete opposition to the situation in Southern Europe, where the economic downturn has struck the hardest in the whole European Union. Abstracting from these issue of within cluster deviation, several observations can be made. Opposing our main assumption that worse economic performance on an aggregate level should be associated with lower rates of independent living, and homeownership in particular, it seems surprising that the Southern European cluster (Cluster 1) has been faring relatively ‘well’ with regard to younger adults’ housing outcomes in the post-crisis period. One possible explanation is that many well-educated younger adults have moved to the European core to look for employment and higher education opportunities that they do not have in their crisis-stricken home countries – an assumption that is supported by Eurostat data on international migration flows. Moving to another country might thus be used as a strategy to start an independent life and avoid prolonged involuntary co-residence. Alternatively, the very high absolute levels of living in the parental home before the crisis among these Southern European countries might mean there was little opportunity for increased co-residence – i.e. the saturation effect previously described. Finally, it could also be possible that the deteriorating economic conditions did not have their full impact until after 2011 in these countries.

The question then arises of why cluster 3 and the UK in particular end up having the most drastic decreases in homeownership and some of the highest co-residence gains. Certainly, the economy of these countries have been relatively feeble and the housing markets have been very sluggish, to say the least, but the numbers are nowhere near the economic turmoil witnessed in Southern Europe. Our contention is that an alternative explanation could be the functionality of the mortgage market prior to and after the housing bust. With the exception of Luxemburg, all Cluster 3 countries as well as the UK have the highest mortgage indebtedness and arguably the most liberalized mortgage finance systems in Europe. Various studies (e.g. Schelkle, 2012) have shown that it is exactly in these countries that mortgage institutions have changed credit accessibility rules most swiftly, putting younger adults in more disadvantaged position. Access to credit in these countries might still be comparatively easy; yet, within their country contexts, the possibilities to finance a house purchase have often deteriorated significantly leading to the strong shift in homeownership opportunities for more precariously employed younger age cohorts.

A final observation then is that robust economic performance and relatively stable housing markets are not a perfect predictor but still have some explanatory power for the housing outcomes of younger adults – admittedly, with Sweden as an outlier. All three countries in Cluster 2 have fared relatively well in terms of economic performance in the 2007-2011 period, as indicated by the lowest average unemployment rates, the highest GDP growth, the smallest growth in participation in education, and the smallest drops in housing completions. Particularly, the German case is a prime example for this development. These more promising socio-economic trends over the crisis period thus seem to be reflected in the more positive housing outcomes of younger adults among these countries. The fact that, in Germany, decreasing co-residence has not led to higher homeownership rates but has almost exclusively been absorbed by the rental sector most likely owes to the strong rental housing culture in the country, especially for young home leavers.

4 Conclusion and discussion

It has been argued in the housing literature and also in popular media and political discourses in liberal ‘homeowner societies’ that the Global Financial Crisis has aggravated the long-term trend of declining homeownership access among younger adults despite the societal transformation process of an increasing importance in the role of housing assets towards households’ economic and social wellbeing. Identifying a lack of knowledge about the wider validity of this claim, this paper applied a descriptive exploratory approach using data from four waves of the cross-sectional EU SILC dataset (2007-2011), to deconstruct the diversity of pre to post-crisis changes of younger adults’ access to homeownership across the EU 15. Special attention was given to the question of what might drive divergent developments and the specific role of the crisis in this process.

The main empirical finding was that the crisis has not itself instigated convergence across the entire European continent. Certainly, it holds true that these do not appear to be favourable times for younger adults to move into the owner-occupied sector. There has been no significant growth in ownership rates in any EU 15 country within the younger age cohort, with more or less strong declines being the norm instead. More accurately, the post-crisis period has seen sharp drops in homeownership among 18-34 year olds with the Northern European countries (especially the Netherlands and in particular the UK) as frontrunners in this development. In many cases, the crisis period represents a reversal of positive pre-crisis trends in this regard, and it appears that, almost everywhere, that younger

households are being increasingly excluded from the owner-occupied sector when compared to older generations. On the other hand, the research has brought to the fore that the (private) rental sector has thrived under the insecurities surrounding homeownership markets in many countries. Notwithstanding these commonalities, the Ward's clustering approach suggested that there is a continuation of variegated housing outcomes of younger adults, especially if we do not regard changing homeownership access in isolation, but see it in the context of alternative and competing housing trajectories, i.e. living in rental housing, rent-free accommodation, or in the parental home. It was made clear that the story popularized in the UK presents an extreme situation that is not reflected at all, or at least is much more diluted, in many EU15 countries.

Discussing potential explanations for the similarities between countries and divergences between clusters of post-crisis change, our study firstly suggests that levels of change are not a mere replication of how hard individual countries were struck by the Global Financial Crisis. There are some signs that a relatively benign macroeconomic climate and housing market may facilitate the realization of independent living arrangements, with Germany being the prime example. Yet, it is in some Northern European countries (including the UK and the Netherlands), rather than in the crisis-stricken countries of Southern Europe, where we observe the sharpest declines in homeownership and rental rates, or conversely, prolonged co-residence. In the same vein, existing housing cultures and tenure structures seem to represent insufficient explanations for changing housing trajectories in the various clusters. On the one hand, homeownership decline is not a matter of the absolute level of, and change in, pre-crisis owner-occupation rates. On the other, our empirical investigation showed that strong increases in co-residence are less likely in countries where late home leaving is deeply rooted in younger adult life courses.

Nonetheless, our finding that post-crisis declines in young-age property ownership are primarily associated with shifting mortgage-credit access testifies to the crucial role of housing systems as a mediator of the way the crisis has impacted the housing careers of younger people at the country level. More precisely, the fact that owner-occupation rates have dropped most substantially in countries that have pursued the ideal of homeownership most rigorously and have represented the more market-types residential capitalism, suggests that the volatile nature of these housing systems may further undermine the chances of younger people, especially those individuals and households that face on-going periods of economic stress.

It is clear that there are limitations to the conclusions that can be drawn from the type of exploratory macro-analysis presented herein; however, the patterns identified in this study provide an important empirical basis to the type of discourse promoted in recent years regarding young people's housing constraints. Certainly, better understanding is needed of the factors that enable, constrain and influence housing decisions of younger people at the individual level, as well as in terms of the national economic, cultural and housing system context, and how these have changed over the recent period of economic recession. Further investigation also needs to specifically address our claim that the functionality of, and changes in, housing finance systems, and in particular mortgage markets, seem to be at least as important as cultural and macroeconomic factors in prescribing the direction and extent of change. While this paper has made some initial progress, more focused study is necessary in order to more effectively understand the relationships between shifting market and economic conditions, housing tenure transitions, individual life-courses and the relative importance of the meaning of home ownership.

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