HORIZON-CL2-2023-TRANSFORMATIONS-01-09

EqualHouse

The Re-Stratification of Homeownership across Europe

EqualHouse report for workpackage 3 *'Profiling and Explaining the Scale, Character and Interaction of Income, Wealth and Housing Inequalities in Europe'*

This project has received funding from the European Union Horizon Europe research and Innovation programme under grant agreement 101132325. The views expressed in this publication are the sole responsibility of the author/s and do not necessarily reflect the views of the European Commission.

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Country codes used in this report

CODE	COUNTRY NAME
BE	Belgium
BG	Bulgaria
CZ	Czech Republic
DK	Denmark
DE	Germany
EE	Estonia
IE	Ireland
EL	Greece
ES	Spain
FR	France
HR	Croatia
IT	Italy
CY	Cyprus
LV	Latvia
LT	Lithuania
LU	Luxembourg
HU	Hungary
MT	Malta
NL	Netherlands
AT	Austria
PL	Poland
PT	Portugal
RO	Romania
SI	Slovenia
SK	Slovakia
FI	Finland
SE	Sweden
UK	United Kingdom

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Housing regimes glossary used in this report

Housing regime	EU countries	Definition in this report
Social Democratic Unitary rental market countries	Denmark, Sweden, Finland, Netherlands	• In the unitary rental market housing-welfare regime, is characterised by a large rental market where both social and private housing providers compete in the same market. • The state plays a strong role in regulating rents and ensuring affordability.
Conservative-Corporatist Unitary mental market countries	Germany, Belgium Austria Luxembourg	• Similar to the social democratic model but with greater involvement of non-profit, cooperative, and employer-led housing. • The rental sector is well-developed, and homeownership is not a dominant aspiration.
North-Western European (NWE) ownership: dual rental market countries	Ireland, UK	• The dual-rental market housing-welfare regime is characterised by high homeownership rates. • This was/is historically promoted by the government through tax subsidies and mortgage support for (low-income) households.
Southern European family-based homeownership countries	Italy, Greece, Cyprus Portugal Spain	• This regime relies on intergenerational wealth transfers to facilitate homeownership, with weak rental markets and minimal public intervention. • Housing serves as a form of welfare due to limited state support. It is characterised by minimal state intervention small/underdeveloped social housing sector and a poorly regulated private rental sector
Baltic countries	Estonia, Lativia, Lithuania	• Post-socialist systems with high homeownership rates due to mass privatisation, but weak rental markets and limited state support for affordability.
Central and Eastern European (cee) countries ‘Post soviet’	Poland Czechia Slovakia Slovenia Bulgaria	• Similar to the Baltic model, but with higher levels of informal housing and a legacy of state withdrawal from housing provision. • Homeownership remains the dominant tenure, but affordability varies. • There have been dramatic changes since the collapse of communism in the early 1990s.

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Introduction

Housing systems have been undergoing a gradual but far-reaching restructuring since the 1990s, driven in part by the reduced access to homeownership for new generations (e.g. Dewilde & Waitkus 2023; Dewilde & Haffner 2022). Homeownership societies that emerged in North-Western Europe after the second world war have entered a new stage of 'late' homeownership, on the one hand marked by increasing outright homeownership due to buying without a mortgage for the wealthy and maturing mortgage contracts for older generations. On the other hand, among the capital-poor, new housing market entrants are longer in debt or are increasingly moving into private rental arrangements (Forrest & Hirayama 2018; Smith et al. 2022). While the post-war development of mortgage markets initially broadened access to homeownership, scholars now point to an increasing divide between 'insiders' and 'outsiders' on the housing market (Arundel & Lennartz 2020). Due to the downscaling of social housing and the attractiveness of housing as an investment vehicle, older cohorts, especially in the upper-middle class, increasingly own (multiple) properties outright (Kadi, Hochstenbach & Lennartz 2020), while new cohorts of 'outsiders' are increasingly sorted into private rental arrangements (e.g. Arundel & Doling 2017; Byrne 2020) or extended co-residence in the parental house (e.g. Lennartz, Arundel & Ronald 2016).

The Global Financial Crisis (GFC) has further exacerbated the divides between insiders and outsiders on the housing market. Especially in North-Western Europe, young adults experience problems entering an increasingly competitive housing market (e.g. Dewilde 2020; Kohl 2021; Lennartz, Arundel & Ronald 2016), not least due to the re-regulation of mortgage credit and the increased competition with investment capital for the existing housing stock (Aalbers 2016). Combined with broader developments such as economic stagnation, job insecurity, and the rise in one-person households, young adults are considered increasingly excluded from homeownership (e.g. Lersch & Dewilde 2015; Arundel & Lennartz 2020). These findings have prompted narratives on 'generation rent' and 'generation co-residence' (Byrne 2020; Hoolachan & McKee 2019; Lennartz, Arundel & Ronald 2016).

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More recently, this view has been further refined in two core ways. First, those arguing for the 're-stratification' of homeownership have emphasized a reduction in access to the housing market amongst lower-income households. For lower classes, the access to homeownership has been found to depend increasingly on (more limited) parental resources and individual status attainment, especially when the growth of property values outpaces the availability of mortgage credit (Mulder et al. 2015; Suh 2020). On the other end of the spectrum, higher incomes benefit through disproportionate house price inflation as well as an increase in multi-property ownership (Dewilde & Flynn 2021; see also Kadi, Hochstenbach & Lennartz 2020), which leads scholars to point at homeownership as a main driver of wealth disparities and social stratification (Dewilde & Waitkus 2023; Adkins, Cooper & Konings 2021).

While few will doubt that access to mortgage credit is higher amongst those with higher incomes (OECD 2021:95) and elite occupations (e.g. Gerber, Zavisca, & Wang 2022), the major question is whether homeownership is increasingly a high-income or elite privilege. Some case studies already hint to growing class disparities amongst new generations. Up until the GFC, homeownership rates in the United Kingdom (UK) were increasingly diverging between occupational classes (Coulter 2020) and increasingly depending on intergenerational transfers (Suh 2020). Howard, Hochstenbach and Ronald (2024) also find that, at least in the Netherlands, private renting has increased with around 20 per cent amongst young adults with low and middle incomes, but much less so for high incomes. Dewilde (2020) confirms this trend with a pre- and post-GFC comparison based on educational divides, showing that educational divides in homeownership are on the rise across Europe in the late phase of young adulthood (aged 30-39). This report combines these insights to assess the state of housing stratification amongst new generations in 29 European countries, (a) distinguishing between early and late phases of young adulthood, and (b) with an explicit focus on the implications for the middle classes:

RQ1: Is homeownership amongst young adults increasingly concentrated amongst high incomes?

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Second, of particular interest in the 'generation rent' literature is the distinction between delayed and foregone homeownership (e.g. Coulter, Bayrakdar & Berrington 2020). Myers, Lee and Simmons (2020) have argued that comparing average levels of homeownership between age groups can be misleading, because they do not accurately distinguish between delayed home-buying and foregoing homeownership. Alongside the increased competition on the housing market, the transition to owner-occupation also coincides with extended educational careers and delayed family formation (Mulder 2013; cf. Tocchioni et al. 2021). This point is also stressed by Coulter and Kuleszo (2024), who find that lower homeownership rates amongst young people in the UK are in part due to a delayed transition.

Crucially, however, this delay in homeownership may well turn out differently for higher and lower social classes, with potentially longer delays in and exclusion from homeownership amongst lower- and middle-income groups. As suggested by Suh (2020:400), a delayed transition to homeownership is already detrimental, as postponed mortgage payments interfere with establishing a financial buffer for economic shocks and financial security in retirement. Nonetheless, the exclusion from homeownership has worse implications. Housing market 'outsiders' not only have greater risks of poverty in later life, but also have limited options to accumulate and transfer wealth over generations (Dewilde & Waitkus 2023:13), perpetuating this disadvantage to children and grandchildren (e.g. Suh 2020; Coulter 2020). A second aim of this report is therefore to investigate whether newer generations 'catch up' with prior generations, with a particular interest in differences between income groups. To this end, we employ cohort analysis, following the aggregate homeownership rates of birth cohorts over time.

RQ2: To what extent do delays in homeownership transitions for newer generations differ by income?

Considering the historical and political diversity between European countries, we use the housing-welfare regimes framework. In the remainder of this report, we outline our theoretical background on 'generation rent' and the income stratification of homeownership and set out our methodological approach. We present our results on the

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development of homeownership transitions in Europe in section 4, before moving to an overall discussion and conclusion.

2. Theoretical background

The literature on homeownership so far leaves us with three expectations on developments in homeownership amongst new generations: (1) generational decline (i.e. across income groups) versus stratified access to homeownership, (2) delayed transitions into homeownership and, rather underdeveloped in the literature, (3) the changing positions of middle classes. We elaborate these briefly before discussing the importance of national contexts.

2.1 Generation and stratification

First, the distinction between the generational decline in, and the re-stratification of homeownership. Several studies have shown that homeownership is decreasing (or rental tenures are increasing) amongst younger age groups in North-Western Europe. This is primarily due to house-price inflation, in turn attributed in part to the increasingly international competition on mortgage markets (Byrne 2020; see also Wijburg & Aalbers 2017) and the restricted access to mortgage credit after the GFC (Lennartz, Arundel & Ronald 2016), in combination with stagnant wages and increasingly insecure employment (Lersch & Dewilde 2015; Arundel & Doling 2017). The generational argument on homeownership developments suggests, often implicitly, that new generations are uniformly affected by housing market pressures (for critiques see McKee et al 2020; Christophers 2018).

The stratification perspective, on the other hand, emphasizes that declines in homeownership differ between income groups (Mckee 2012). Several studies have pointed to the increased importance of family resources, where children in adverse economic conditions extend their stay at the parental house (Stone, Berrington & Falkingham 2014) or rely on financial transfers in times of constrained mortgage credit and inflated property values (e.g. Howard, Hochstenbach & Ronald 2024; Coulter 2020; Suh 2020; Dewilde 2020; Bayrakdar et al. 2019). Additionally, developments such as flexible employment, wage stagnation, and welfare retrenchment have arguably disproportionately affected the creditworthiness of low incomes (Ronald 2018). The growing importance of parental wealth and homeownership implies that young adults from low-income families have increasing difficulties in buying their first house. In this report we distinguish between generational trends - a uniform decrease across income groups - and stratification trends, where the decline in homeownership is a middle- and especially lower-income phenomenon.

Secondly, delayed transitions into homeownership have been a second major concern in the literature. Homeownership transitions are not only affected by housing market conditions, but also by interrelated demographic changes such as delayed family formation and extended educational careers (Coulter, Bayrakdar & Berrington 2020). This life-course perspective has broadly shown that low incomes are slower to transition into homeownership (Bayrakdar et al. 2019), as well as emphasizing the increasing 'non-linearity' of housing careers, i.e. moving back to the parental house due to e.g. unemployment or divorce (Stone et al. 2014). Despite their nuance, however, these life-course models are rarely employed to investigate changes in young adults' housing pathways over generations. To capture delays in homeownership transitions, age group comparisons now often distinguish between 'young-young adults' below the age of thirty and 'old-young adults' until the age of forty. Dewilde (2020:94), for example, finds that "the transition to homeownership seems mainly (and increasingly) to take place in the 'older young' age brackets". Coulter and Kuleszo (2024) found that successive cohorts in the UK partly caught up with their predecessors in their rates of homeownership after the GFC. Including delays is thus necessary to correctly profile stratification and generational developments in homeownership transitions.

Third, the quantitative literature has been largely silent on the positions of middle classes in this process of tenure restructuring. While qualitative interviews with middle-classe respondents point to depressed housing aspirations amongst young adults from the middle-classes (e.g. Gentili & Hoekstra 2021; see also Preece et al. 2020), evidence on middle-class developments in homeownership rates are scarce. A null hypothesis would be that, over time, middle incomes retain their relative position in terms of

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homeownership, keeping similar distance between low and high incomes. In the Netherlands, however, the decline in homeownership rate is stronger for middle incomes than lower incomes (Howard, Hochstenbach & Ronald 2024). Here, middle incomes are increasingly sorted into expensive private rental arrangements, as they are excluded from social housing as well as mortgaged homeownership. Middle-income homeownership could thus also be eroding faster than low-income homeownership, perhaps because they have more to lose in terms of homeownership.

2.2 Housing regimes

Finally, any comparative profile of homeownership rates must deal with housing-welfare regimes, defined as the ideological and political context that determines the role of state, market, and family in the "social, political and economic organization of the provision, allocation and consumption of housing" (Dewilde & De Decker 2016: 121). To make sense of these qualitative differences, researchers group countries into so-called housing-welfare regimes (Kemeny 1995; see also Schwartz & Seabrooke 2009). Though not without its critiques (for a review see Flynn & Montelbano 2024), the housing regime remains a useful conceptual device to condense the great variety in historical origins of European housing systems. In accordance, the analysis below is performed by country but organised by housing regime.

We distinguish between five regime types. In social-democratic unitary rental market-countries (i.e. the Nordic countries), housing has become increasingly commodified and financialized despite their historically more integrated rental markets. Relaxed legal restrictions on mortgage eligibility, fiscal advantages for homeowners, as well as declining rental affordability combined to fiercely increase competition on the housing market in the social-democratic countries (Lennartz & Ronald 2017; Tranøy, Stamsø & Hjertaker 2021). Housing market competition is much less pronounced in the conservative-corporatist unitary rental market-countries in North-Western Europe, particularly Germany and Austria. Much like their Nordic neighbours, these countries built up large social housing sectors after the second world war and imposed rent controls on private rental arrangements, making renting an appealing alternative to homeownership. Moreover, since the 1990s Germany privatized social housing, subsidized new

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construction of homeownership, and relaxed rent controls in the private sector (Eslinga, Stephens & Knorr-Siedow 2014). So far, however, the housing system in these countries seems more resistant to the trend towards owner-occupation (Stephens 2020; Voigtander 2009)

Dual rental market countries in North-Western Europe, of which the UK is a prototypical example, provide social housing for the poor while homeownership is the preferred tenure for the remainder of the population (Stephens 2020; see also Ronald 2008). Whereas the increased availability of mortgage credit initially broadened access to homeownership, increased competition on the housing market reduced access for young adults by the turn of the century. Meanwhile, the private rental sector saw a revival as rent-control was relaxed and fixed-term contracts were introduced.

Central- and-Eastern European countries (CEE) share a state-socialist legacy, marked by standardized and lower-quality housing and the radical transition from state- to privately-owned housing after the collapse of communism. Because homeownership is ubiquitous and less commodified in post-socialist countries, the transmission of housing wealth across generations has been argued to reduce housing wealth inequality rather than exacerbating it (Lux & Sunega 2023).

Southern European housing systems have familial traits: state involvement and market development in the production and allocation of housing is limited (e.g. Pareja-Eastaway & Sanchez-Martinez 2017). Households instead tend to co-reside with extended family and pass on housing across generations.

3. Methodology

This report seeks to comprehensively profile developments in homeownership rates over generations and social strata in 29 European countries. Using EU-SILC 2005-2023, we pool respondents aged 21-45 not currently in education (PE010), including all countries except Iceland. After excluding respondents with no reported individual income (2.1%), our sample is comprised of N = 2.845.704 respondents in 32 countries for the age-group analysis. A further exclusion of incomplete cohort-age groups (details see below) leaves N= 2.447.364 respondents for the cohort analysis. All percentages are weighted using the personal cross-sectional design weight (RB050), which adjusts them for bias in the selection of respondents and non-response, before calibrating them to match country-distributions on demographics of available census data.

3.1 Operationalization of variables

Homeownership is a binary variable defined on the individual level as 'independent' mortgaged or outright homeownership as (partner of) head of household (1) versus renting (at or below market rate), residing rent-free, and parental co-residence (0). Since the tenure variable is originally reported on the household level (for a discussion see Marcinkiewicz 2024), we constructed an indicator of tenure at the individual level, which distinguishes coresidents from the household reference person. Coresidents are persons that either live with their parents or the parents of their (registered) partner, disregarding tenure. While intuitive and correct for most cases, this operationalization does not capture some situations, in particular other extended family living in the household and elderly parents living with their children, for example in caregiving arrangements. Still, since these complex housing arrangements are relatively rare and more prevalent later in life, we argue that our measure suits the purpose well enough.

Age is computed by subtracting survey year from year of birth, providing an estimate of age with an error margin of around one year. The age groups used differ between the age-group comparison (Tables 2-4) and the cohort analysis (Figures 1-4). For the age-group comparison, we construct age groups on theoretical grounds. In recognition of the importance of 'early' and 'late' young adulthood (e.g. Dewilde 2020), we use five age groups in this analysis: 21-25; 26-30; 31-35; 36-40; and 41-45. While those aged 41-45 are arguably passed the age of young adulthood, they form a useful comparison as an age group where first entry into homeownership rates is increasingly unlikely. In the cohort analysis, age groups are constructed to allow comparisons between cohorts as they age. Since we have a limited number of waves available, we compare cohorts over seven smaller age groups: 21-24; 25-28; 29-32; 33-36; 37-40; 41-44; 45-48.

We operationalize income tertiles based on EU-SILC's individual income components. Since several countries do not report net individual income components, we use gross individual income components. For the waves 2005 and 2006, only net income

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components are available for Greece, Spain, Italy, Latvia, and Portugal, with which we proceed. Available individual components are wage income (PY010), company car (PY201), losses and profits of self-employment (PY050), unemployment benefits (PY090), survivors' benefits (PY110), sickness benefits (PY120), disability benefits (PY130) and education allowances (PY140). We take a sum of these benefits, insofar applicable, and set any negative sums to zero. Income from private pension (PY050) and old-age benefits (PY100) are likely zero for the sample but included in the sum for the sake of thoroughness. Income tertiles are then computed within countries, corrected for sampling bias using the individual cross-sectional design weight (RB050). As a robustness check, we estimated the polychoric correlations between gross and net income tertiles in the country-years for which both net and gross income components are complete. As shown in Appendix A, the net and gross income positions align near-perfectly, with correlations varying between r=.943 in Hungary 2022 and r=.999 in Estonia 2023.

3.2 Analytical approach

We perform two types of analyses, an age-group comparison and a cohort analysis. The age group comparison simply splits out homeownership rates per country, year, age-group and income tertile, and reports the percentage of homeowners in each category. Not all country-years are available, due to the removal and addition of countries to EU-SILC over time. Moreover, due to the disaggregation of respondents into countries, years, income, and age groups, as well as the selection of those no longer in education, some categories – especially young and low income – contain only few respondents. To ensure the robustness of these statistics to some degree, we report only percentages based on at least 50 respondents. The full disaggregation of homeownership rates is included in Supplementary Database A. While informative for country-specific lookups, this Supplementary Database is too large to interpret comparatively. To provide an overview, we summarize the changes in homeownership rates for each country-income-age group as the difference at the beginning and the end of the available time series 2005-2023. Specifically, we take the average homeownership rate for the years 2018-2023 (2017-2018 for the UK) and subtract this from the average homeownership rate for the years 2005-2008. Comparing these two periods omits the dip in homeownership rates caused by the

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GFC in many countries and instead informs us on the pre-GFC versus post-GFC developments – e.g. the (lack of) recovery of homeownership rates to pre-GFC levels.

Second, we perform a cohort analysis, i.e. tracking the homeownership rate of birth cohorts as they age (Deaton 1985). The method allows for the comparison of birth cohorts, although it may be sensitive to hidden changes in the composition of cohorts e.g. due to migration (Fields & Viollaz 2013; see also Colgan 2023). We compare the homeownership rates of six birth cohorts (1968-1971; 1972-1975; 1976-1979; 1980-1983; 1984-1987;1988-1991) between four age groups (21-24; 25-28; 29-33; 33-36; 37-40; 41-44; 45-48). Since we are dealing with a limited time window (2005-2023), we do not have complete observations of these cohorts over their life course. Older cohorts are left-censored (we do not know their homeownership rates when they were young) and younger cohorts are right-censored (we do not yet know how their homeownership rates will develop). The comparison is thus based on the four periods or age groups that are completely observed for each cohort, as illustrated in Table 1.

Table 1. Age-cohort groups and their periodic range

	21-24	25-28	29-32	33-36	37-40	41-44	45-48
1968-1971					2005-2011	2009-2015	2013-2019
1972-1975				2005-2011	2009-2015	2013-2019	2017-2023
1976-1979			2005-2011	2009-2015	2013-2019	2017-2023	
1980-1983		2005-2011	2009-2015	2013-2019	2017-2023		
1984-1987	2005-2011	2009-2015	2013-2019	2017-2023			
1988-1991	2009-2015	2013-2019	2017-2023				

Note also, that cohorts are exposed to the GFC-period – for ease referred to as 2009-2015 – at different ages. The cohorts 1980-1983 and 1976-1979 reach peak transition ages 29-36 during the GFC. Cohorts 1984-1987 and 1988-1991 reach this age in the post-GFC period, while the cohorts 1968-1971 and 1972-1975 reach this age during the pre-GFC period. In the cohort analysis (Figures 1-3) we mark these periods with different colours.

4. Results

The results of our analysis are presented in this section. We organized the discussion on the income-stratification of homeownership per regime-family: North-Western

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Europe, Central-Eastern Europe (including the Baltics) and Southern Europe. In each subsection we discuss first the age group analysis before moving to the cohort analysis. For ease of interpretation, the age-group comparison summarizes the complete trends (presented in the Supplementary Database A) by taking the difference in average homeownership rates between 2005-2008 and 2021-2023 (see also section 3.2). As elaborated in the theory section, we interpret these trends as generational or income-stratified, with special attention to changes amongst the middle class and accounting for delays in homeownership transitions. We broadly find that homeownership in social-democratic and some dualist rental market-countries is mostly income-stratified, while homeownership in several Southern-European countries is facing a generational decline – i.e. regardless of income – notwithstanding some exceptions. In some post-socialist countries, high-income groups move into homeownership at a higher rate, meaning that homeownership rates are becoming increasingly stratified through expansion. Delays in homeownership transitions are mostly a high-income response to the GFC, whereas low incomes seem to be durably excluded.

4.1 North-Western Europe

In North-Western Europe, many countries show increases in the income-stratification of homeownership, particularly amongst older young adults. In the Netherlands, Sweden, Austria, Belgium, France, and Norway, changes in homeownership are exclusively characterized by income-stratification. In these countries, homeownership rates are stable or even increasing for high incomes but decrease amongst lower incomes. In Sweden, for example, homeownership rates amongst 31–35-year-olds decreased with -23.9 per cent for lower incomes while remaining largely stable with -1.6 per cent for higher incomes, a pattern that holds for all age groups. One could also look at the percentages in Supplementary Database A: 56 per cent of low-income Swedes aged 31–35 owned a home in 2005, and only 33 per cent in 2023, while homeownership amongst their high-income counterparts is stable at 69 per cent in 2005 and 70 per cent in 2023. Similarly, in Belgium, homeownership amongst 31–35-year-olds decreased with -10.6 per cent for low incomes, while increasing with +6.6 per cent for higher incomes. For the Netherlands, homeownership rates amongst high incomes have declined in younger age groups (e.g. -

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11,7% for 26-30-year-olds), but not in older age groups (e.g. +9.6% for 36-40-year-olds), suggesting either a critical juncture for new generations regardless of income, or a delayed transition for higher incomes, as we explore further in the cohort analysis below.

In Denmark, Germany, Switzerland, and Ireland the shift away from homeownership is both generational and income-stratified: homeownership decreases for all income groups, but much more strongly for lower incomes, especially at later ages. For example, for those aged 26-30 in Denmark, homeownership decreases more strongly for high incomes (-19.5%) compared with low incomes (-15.7%). This pattern gradually inverses for later age groups, with the decrease amongst those aged 41-45 being much stronger for low incomes (-16.1%) than high incomes (-3.9%). Similarly, in Germany, homeownership rates decrease substantially in all low-income age groups (e.g. -18.7% amongst 36–40-year-olds), while homeownership decreases less strongly for their high-income counterparts (e.g. -10.1% amongst 36-40-year-olds). In these countries, it seems reasonable to at least partly retain the 'generation rent' or 'generation co-residence' perspective on tenure developments (Byrne 2020; Lennartz, Arundel & Ronald 2016, cf. Hoolachan & McKee 2019). Those aged 36-40 and 41-45 in 2021-2023 experienced the GFC at their peak homebuying age, which suggests that low incomes in these countries were durably excluded from homeownership as a consequence of the GFC, a suggestion confirmed by the cohort analysis in Figure 2 below.

A generational decline in homeownership is most visible only in the UK, where declines are roughly similar for all income groups. Amongst those aged 36-40, homeownership rates decreased with -13.5 per cent for low incomes, -15.0 per cent for middle incomes, and -11.6 per cent for high incomes between 2008-2010 and 2016-2018. In yearly percentages too – presented in Supplementary Database A – the same generational decline is visible. At the ages 36-40, low-income homeownership decreased from 48.1% in 2005 to 39.6% in 2018, and high-income homeownership dropped similarly from 79.9% in 2005 to 71.9% in 2023. Notable exception is the age group 41-45, where the reduction for high incomes (-6.7%) is notably smaller compared to middle incomes (-15.9%) and low incomes (-11.7%). While somewhat less pronounced in other age groups, these tendencies reflect most closely the idea that an entire generation is increasingly excluded from homeownership,

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regardless of income position. This supports studies on 'generation rent' focused on the UK, who pointed to a generational decline in this country (e.g. Dewilde, Hubers & Coulter 2018), while drawing into question studies that point towards increased homeownership stratification in the UK (e.g. Dewilde 2020).

Table 2.: Difference in homeownership rates before 2008 and after 2021 in North-Western Europe

			Low income	Middle income	High income
Social-democratic unitary rental market-countries	DK	26-30	-15.7%	-17.8%	-19.5%
		31-35	-18.6%	-15.1%	-11.1%
		36-40	-19.1%	-8.0%	-6.6%
		41-45	-16.1%	-12.2%	-3.9%
	NL	26-30	-5.0%	-10.6%	-11.7%
		31-35	-12.8%	-3.7%	-4.5%
		36-40	-11.7%	1.1%	6.9%
		41-45	-14.7%	4.9%	9.6%
	SE	26-30	-14.2%	-2.7%	2.9%
		31-35	-23.9%	-10.3%	-1.6%
		36-40	-16.1%	-17.0%	-3.3%
		41-45	-18.5%	-13.6%	-0.1%
Conservative-corporatist unitary rental market-countries	AT	26-30	-5.5%	-1.4%	1.9%
		31-35	-13.3%	-12.5%	-4.0%
		36-40	-17.0%	-2.5%	-3.3%
		41-45	-16.4%	-5.4%	1.8%
	DE	26-30	-9.7%	-4.3%	-6.5%
		31-35	-17.9%	-9.9%	-9.2%
		36-40	-18.7%	-14.3%	-10.1%
		41-45	-18.0%	-9.4%	-8.1%
	FR	26-30	-12.9%	0.1%	2.1%
		31-35	-17.7%	-0.1%	0.3%
		36-40	-16.6%	3.8%	5.8%
		41-45	-17.8%	1.9%	7.6%
NWE homeownership countries with a dual rental market	BE	26-30	-15.2%	-3.6%	8.9%
		31-35	-10.6%	-0.3%	6.6%
		36-40	-18.4%	3.8%	2.8%
		41-45	-16.4%	-9.0%	4.0%
	CH	26-30	-7.1%	-1.7%	-3.9%
		31-35	-6.4%	-0.8%	-0.1%
		36-40	-11.7%	-7.6%	-9.5%
		41-45	-15.8%	-2.8%	-4.0%
	FI	26-30	-15.7%	-9.8%	-2.9%
		31-35	-6.1%	-10.1%	-3.5%
		36-40	-6.3%	-5.7%	-2.8%
		41-45	-10.0%	-0.8%	2.8%
	IE	26-30	-17.7%	-8.1%	-0.1%
		31-35	-20.8%	-16.1%	-19.6%
		36-40	-21.4%	-26.2%	-18.3%
		41-45	-29.0%	-22.6%	-12.9%
	LU	26-30	-6.5%	21.1%	10.3%
		31-35	-14.6%	14.7%	16.6%
		36-40	-11.2%	7.3%	-3.9%
		41-45	-23.8%	-0.6%	-5.9%
	NO	26-30	-16.4%	-3.5%	-4.2%
		31-35	-11.1%	-10.3%	-6.4%
		36-40	-13.8%	-14.9%	-4.5%

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		41-45	-13.2%	-7.3%	0.0%
	UK	26-30	-7.9%	-13.7%	-15.5%
		31-35	-9.4%	-14.1%	-14.2%
		36-40	-13.5%	-15.0%	-11.6%
		41-45	-11.7%	-15.9%	-6.7%

Note: UK difference compared to 2017-2018 due to data availability.

Moreover, the age-group analysis suggests that delays in homeownership are mostly a high-income phenomenon. Decreases in homeownership rates amongst younger age groups but not older age groups suggest that homeownership transitions are delayed rather than that a durable exclusion from homeownership is taking place. The Netherlands presents the most extreme case of high-income delays, as homeownership rates dropped by -11.7 per cent amongst 26-30-year-olds, but increased by 9.6 per cent amongst 41-45-year-olds. For low incomes, on the other hand, decreases in homeownership are much larger at ages 41-45 (-14.3%) compared to ages 26-30 (-5%). Similarly, in Denmark, high income-respondents seem to delay homeownership, with homeownership rates amongst 26-30-year-olds decreasing with -19.5 per cent between 2005-2008 and 2021-2023, a difference reduced to only -3.9 per cent at the ages 41-45. Meanwhile, reductions in homeownership are largely stable across age groups for low incomes. Aside from a delay in homeownership transitions discussed below, these statistics also hide different trajectories for low and high incomes, such as the decision to stay living at home versus moving to the city for education. To a lesser extent, age-group differences in homeownership amongst high incomes are observed in Finland, Norway, and the UK. In addition, delay patterns are visible amongst middle incomes in the Netherlands and Finland. Note, however, that we cannot draw hard conclusions on delays based only on age-group comparisons, since such analyses do not follow (groups of) individuals over time.

Developments in the position of middle classes also differs substantially between countries. In France, the Netherlands and especially Luxembourg, homeownership amongst middle incomes is stable or even rising, especially at later ages. Particularly in Luxembourg, middle classes in all age groups are more likely to be homeowners over time, particularly amongst those aged 36-40 (+21.1%). In other countries, such as Sweden, Ireland, and Denmark, middle classes are losing ground. While high income groups in Sweden maintain their homeownership rate, homeownership is decreasing for middle

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incomes sometimes to the same extent as low incomes. For those aged 36-40, for example, homeownership in the middle class decreased by -17.0 per cent, similar to the -16.1 per cent reduction amongst low incomes. The same can be said for Ireland: homeownership rates amongst middle incomes are decreasing roughly the same as amongst lower incomes. In Denmark too, middle incomes lose out, although not as much as low incomes, with a decline of -8.0 per cent for middle incomes aged 36-40 and around -12.2 per cent for the oldest age group.

The cohort analyses presented in Figure 1 gives insight into whether homeownership in the social-democratic unitary rental market-countries is increasingly delayed or foregone. Myers, Lee and Simmons (2020) showed that in the United States (US), homeownership rates in younger age groups ‘caught up’ over time, suggesting that differences between age groups are only temporary (see also Coulter & Kuleszo 2024). This is attributed not only to the prevailing housing market conditions at homebuying age, but also to delays in family formation (e.g. Mulder 2013) and labour market conditions (e.g. Stone et al. 2014). As already suggested by the age-group analysis in Table 2, the cohort analyses in Figure 1 shows that such delay of homebuying is highly stratified. High-income cohorts, if they fall behind at all, tend to catch up with preceding cohorts near perfectly. Low-income cohorts, on the other hand, show little indication of catching up with their predecessors. This is particularly visible in Denmark and Sweden, and to a lesser extent in the Netherlands. Whereas 51.5 per cent of low-income Danes born in ’68-’71 owned a home by the age of 37-40, this number is reduced to 30.6 per cent for low-income Danes born in ’80-’83 (see also Supplementary Database B). Moreover, both in Denmark and Sweden, there appears to be a substantial and persistent gap between the ‘pre-GFC’ cohorts in blue and the ‘peri-GFC’ cohorts in orange, the latter reaching homebuying age around the Global Financial Crisis. Apparently, the housing and ensuing economic crisis has left an enduring mark on the homebuying abilities (or preferences) of the middle classes in Denmark.

Also remarkable is the decline in homeownership rates in older years, particularly for low-income cohorts in Denmark, Sweden, and the Netherlands. For example, 52.4 per cent of low-income Danes born in ’72-75 were homeowners at the age of 33-36, which fell

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to 35.1 per cent at the age of 45-48. In Sweden, homeownership rates in the same low-income cohort fell from 46.9 per cent at the age of 33-36 to 34.3 per cent at the age of 45-48. Smaller but similar effects are visible in other cohorts around the same age, even in the pre-GFC cohorts, pointing to a stratified retreat from homeownership. While difficult to say without following individuals over time, these later-in-life declines suggest that low-income cohorts in social-democratic unitary rental market countries not only have difficulties moving into homeownership but are also more likely to return to rental tenures later in life.

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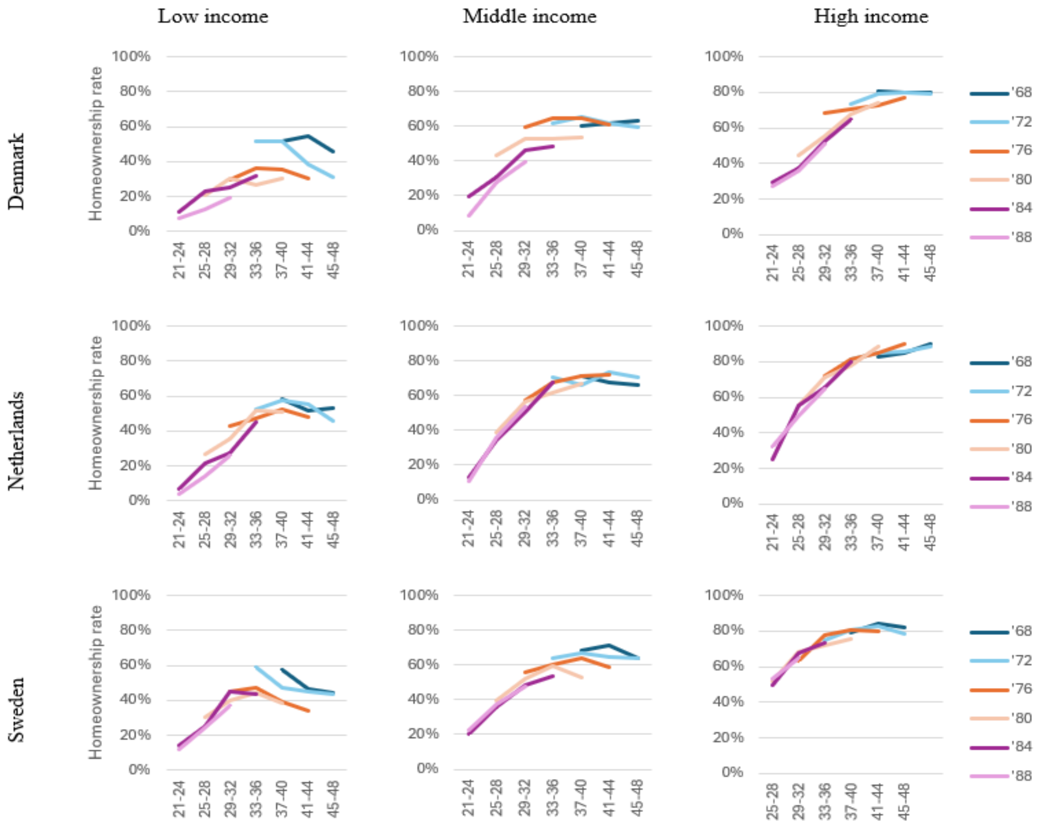
Figure 1. Change in homeownership rates between cohorts in social-democratic unitary rental market countries



Note: Colours roughly correspond to periods, pre-GFC (purple), peri-GFC (orange) and post-GFC (blue). See Table 1. for details.

Conversely, as shown in Figure 2, income-stratification of homeownership is much less prominent in the conservative-corporatist unitary rental market countries: Austria, Germany and France. Regardless of income, successive cohorts mostly keep up with previous cohorts and end up at roughly similar homeownership rates. Nonetheless, like in the social-democratic unitary rental market countries, especially for low incomes, a gap in homeownership rates emerges for the peri-GFC cohorts (in orange), with no indication of recuperation after the crisis. In Austria and France, the GFC seems to have affected only the homeownership rates of low-income young adults. While the French housing market may have been resilient to the GFC overall, homeownership has nonetheless become increasingly stratified, perhaps in part due to the explicit targeting of fiscal benefits of homeownership to middle incomes (Wijburg 2019). Similarly, whereas 51.7 per cent of

Austrian low-income respondents born in ’68-’71 owned a home at the verge of middle age (37-40), this fell back to 42.7 per cent for those born in ’80-’83, reaching homebuying age during the GFC. In Germany, the GFC affected middle-income homeownership to a similar extent as that of low incomes. In the cohort ’68-’71, 49.9 per cent of middle incomes owned a home at the age of 37-40, which fell back to 35.4 per cent in the cohort ’80-’83. This between-cohort decrease of -14.5 per cent for middle incomes is even slightly larger than the -12.9 per cent decrease amongst the same low-income cohorts. The scarring effects of the GFC for low incomes in conservative-corporatist unitary rental market countries also explain the steep declines in homeownership amongst age groups. In Table 2, those aged 36-40 and 41-45 in 2021-2023 represent the peri-GFC cohort, who have seen their homeownership rates drop roughly 16 to 18 per cent between 2005 and 2023. Apparently, in Germany, the ‘third wave’ of financialization (Wijburg & Aalbers 2017:979) scarred an entire generation of homeowners, but especially low- and middle incomes, suggesting an even further increasing role of parental capital in home-buying following the GFC. In sum, in the conservative-corporatist countries with a unitary rental market, the GFC left a lasting dent in the homeownership rates of low incomes.

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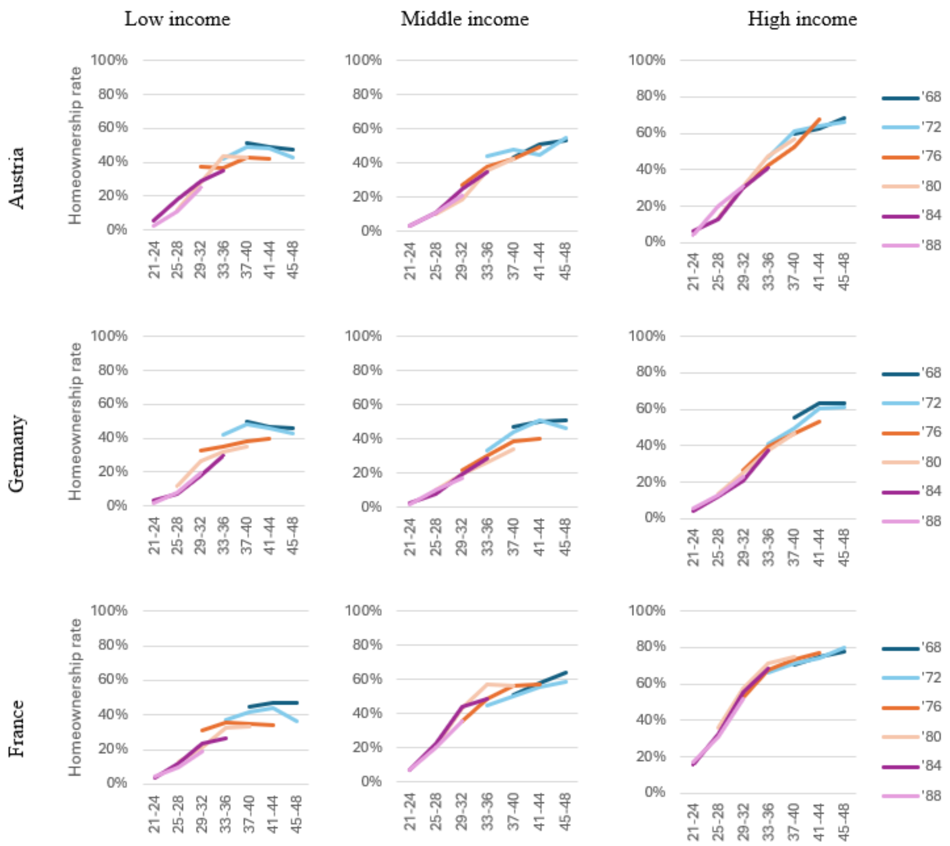
Figure 2.Change in homeownership rates between cohorts in conservative-corporatist unitary rental market countries



Note: Colours roughly correspond to periods, pre-GFC (purple), peri-GFC (orange) and post-GFC (blue). See Table 1 for details.

In dualist rental market homeownership countries, interestingly, we see less income-stratification than in some social-democratic countries (see Figure 3). Especially Belgium shows little sign of re-stratification, as even low-income cohorts are eventually catching up with the foregoing cohort. In Luxembourg homeownership is even increasing for middle- and high incomes (see Supplementary Database B). The Irish housing market was hit by the GFC particularly hard (Byrne 2023), and while middle- and higher-income young adults seem on the path to recovery, homeownership rates of low incomes seem to have been durably depressed by the crisis. Again, homeownership amongst high incomes in Ireland is only delayed, as cohorts catch up with the rates of prior cohorts as they age. For example, at the age of 29-32, homeownership rates are 19 per cent lower for the cohort '84-'87 compared to the prior cohort '80-'84, a difference that shrinks to just 2.7

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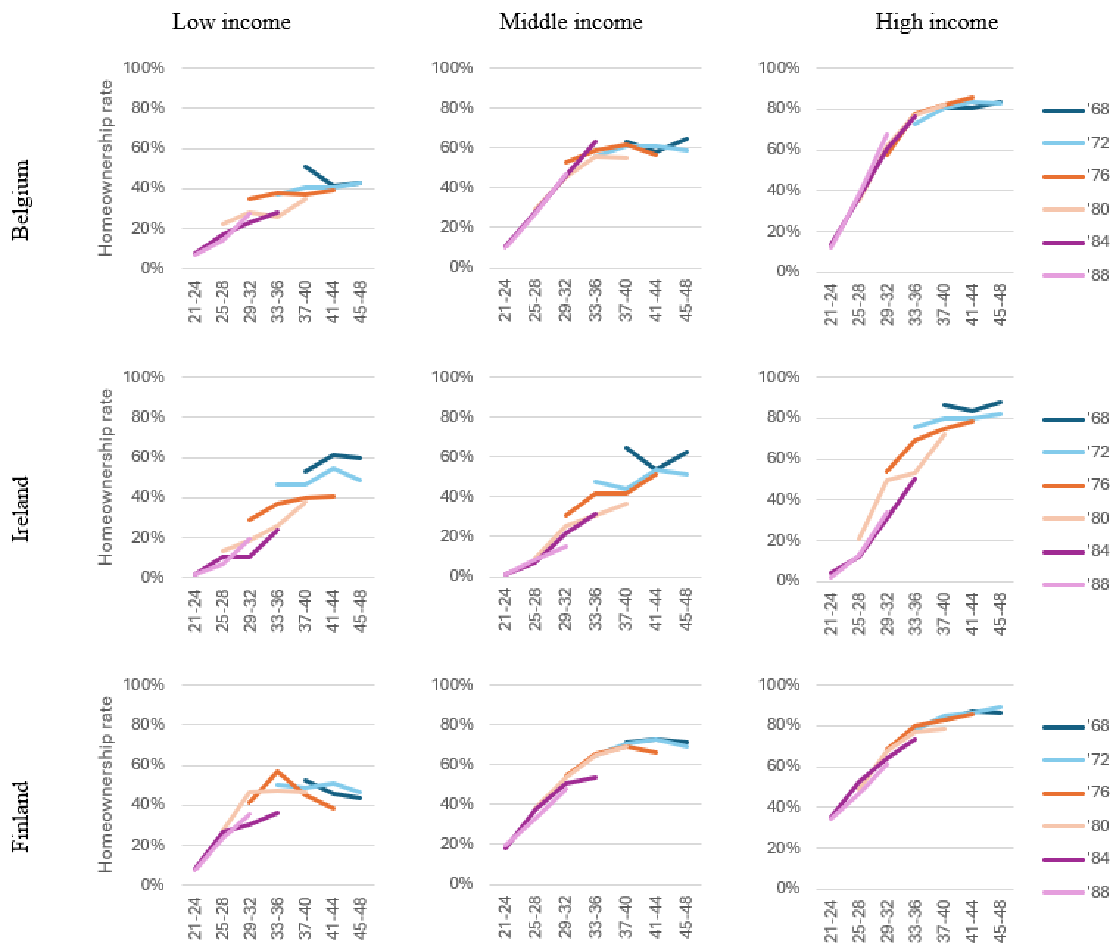
per cent four years later. For low-income Irish, on the other hand, cohorts reaching peak homebuying age during the GFC (in orange) have substantially lower homeownership rates compared to the pre-GFC cohorts. 54.7 per cent of low incomes born between '72-'75 owned a home at the age of 41-44, compared to 48.2 per cent in the peri-GFC cohort '76-'79.

Figure 3. Change in homeownership rates between cohorts in dualist rental market homeownership countries



Note: Colours roughly correspond to periods, pre-GFC (purple), peri-GFC (orange) and post-GFC (blue). See Table 1 for details.

Moreover, similar to what we observed in the social-democratic welfare states, low incomes in Finland and Norway seem to be exiting homeownership at later ages. In Finland, for example, 56.6 per cent of the '76-'79 cohort with low incomes owned a home

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at the age of 33-36, which steeply dropped to 38.6 per cent by the time they are aged 41-44. In Norway, homeownership rates in the same low-income cohort drop by -5.9 per cent, and decrease for all cohorts after the age of 33-36 (see Supplementary Database B). To a lesser extent, this decline in homeownership is also observed for the middle classes in Norway and Finland, with slightly lower rates compared to prior cohorts at the end of the observed time series. While speculative, these trends may be the start of a continued decline in homeownership for the middle classes in these countries. Unfortunately, due to limits in the available time series, this cohort analysis cannot be performed for Switzerland and the UK.

In sum, access to homeownership in North-Western Europe is, especially in the social-democratic welfare states, increasingly stratified along the lines of income. Delays in homeownership seem to be primarily a high-income phenomenon, while exclusion appears to be a durable state for low incomes. The GFC left a lasting gap in homeownership rates for low-income young adults, and the situation seems to have deteriorated further in social-democratic countries post-GFC. Particularly worrying is the increased return to rental tenures at later ages amongst low incomes, suggesting that pressure is mounting not just in accessing homeownership, but also in retaining homeownership at later ages.

4.2 Eastern Europe

Across Eastern Europe, trends in homeownership rates are diverse, with several countries moving towards stratified decline comparable to the West, others marked by an expansion of homeownership, and others still being relatively stable or unsystematic in their homeownership trajectory. These mixed trajectories underline the diversity of Eastern- European housing markets, and the limits of grouping these countries into a single regime-type.

The re-stratification thesis (e.g. Forest & Hirayama 2018; Smith et al. 2022) was not originally applied to the Eastern-European context, not least due to the generally high importance of inheriting housing from family. Housing inequalities are often not marked by homeownership as such, but rather by differences in the quality and location when acquiring housing through the market versus inheritance (Gerber, Zavisca & Wang 2022;

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Soaita & Dewilde 2021). Nonetheless, despite this conceptual distinction, multiple post-socialist countries (Estonia, Slovenia and Slovakia) are now showing signs of homeownership stratification traditionally linked to the market-based provision of housing (Table 3). In Estonia, for example, homeownership is decreasing especially amongst the low incomes. Whereas 70.3 per cent of low-income Estonians aged 36-40 owned a home in 2005, this decreased to 61.2 per cent in 2023. High incomes of the same age, on the other hand, largely retained their homeownership rate with 83.4 per cent in 2005 and 81.0 per cent in 2023 (see Supplementary Database A). Table 2 shows similar numbers: comparing 2005-2008 and 2021-2023, homeownership declined by -12.7 per cent for low incomes and -0.6 per cent for high incomes. This stratification of homeownership is also visible in Slovenia and Slovakia, where homeownership decreases more strongly for low incomes than high incomes. In Romania, this stratification is occurring mostly for the youngest age group, which might point to delays in homeownership transitions as well as durable exclusion. Apparently, access to homeownership – regardless of quality or location – is increasingly relevant in Central-and-Eastern Europe, potentially even in some classic 'super-homeowner' societies such as Romania.

Contrastingly, homeownership is on the rise in Poland and Lithuania, albeit in different ways. In Poland, increases in homeownership are stratified, meaning that homeownership rates are growing much more strongly for middle and high incomes. For example, between 2005-2008 and 2021-2023, homeownership rates of low-income Poles aged 36-40 increased by 8.0 per cent, while increasing with 24.6 per cent amongst high incomes in the same age group. Similar developments are observed for all age groups in Poland, suggesting that the increased access to homeownership thus disproportionally benefits high incomes. This aligns with the inflated property values also observed in Poland since 2016, but also emphasizes the necessity of a stratification lens as opposed to a purely generational argument (cf. Bryx et al. 2021). In Lithuania, on the other hand, the situation is inversed: while homeownership is increasing in all income and age groups, the increase is stronger for low incomes. Amongst low-income Lithuanians aged 31-35, homeownership increased by 16.0 per cent between 2005-2008 and 2021-2023, compared

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to a 9.0 per cent increase amongst high income Lithuanians in the same age group. These findings contrast with reports on the perceptions of deteriorating access to homeownership amongst Lithuanian youth (Braziene et al. 2024).

In a third set of post-socialist countries, we find no clear patterns of change. Homeownership in Hungary, for example, is largely stable for most age groups. Homeownership rates dipped around the time of the GFC especially for low and middle incomes, but also recovered afterwards, producing little sustained difference between 2005-2008 and 2021-2023. Only the Hungarian middle class aged 36-40 has lost some ground in terms of homeownership (-7.8%), the cause of which is difficult to derive from these descriptive statistics.

Table 3. Difference in homeownership rates before 2008 and after 2021 in Eastern Europe

			Low	Middle	High
Central-and- Eastern European countries	BG	26-30	4.0%	2.6%	-7.3%
		31-35	10.0%	5.0%	0.9%
		36-40	-1.8%	1.1%	-6.0%
		41-45	-7.0%	-5.6%	0.1%
	CZ	26-30	-1.2%	-4.3%	-2.7%
		31-35	7.7%	-5.3%	-0.2%
		36-40	9.1%	-2.4%	2.2%
		41-45	1.1%	-1.5%	6.3%
	HU	26-30	1.1%	3.1%	6.5%
		31-35	2.7%	-3.8%	-2.2%
		36-40	1.8%	-7.8%	-1.6%
		41-45	2.6%	-3.3%	-2.3%
	PL	26-30	8.5%	13.7%	16.7%
		31-35	12.7%	21.2%	23.3%
		36-40	8.0%	16.8%	24.6%
		41-45	9.8%	16.2%	27.1%
	RO	26-30	-10.5%	-10.8%	-3.2%
		31-35	-4.5%	6.7%	-5.0%
		36-40	-6.6%	3.4%	-4.8%
		41-45	-3.8%	-0.3%	-5.9%
	SI	26-30	-0.1%	0.5%	8.2%
		31-35	-3.4%	-8.1%	4.2%
		36-40	-10.7%	-2.5%	-2.9%
		41-45	-13.2%	-17.0%	-2.8%
	SK	26-30	-6.1%	-2.6%	-4.9%
		31-35	-6.2%	-12.6%	-10.1%
		36-40	0.5%	-8.5%	-5.0%
		41-45	-10.9%	-8.0%	-2.5%
Baltic countries	EE	26-30	0.1%	1.4%	-0.4%
		31-35	-12.7%	-1.8%	-1.2%

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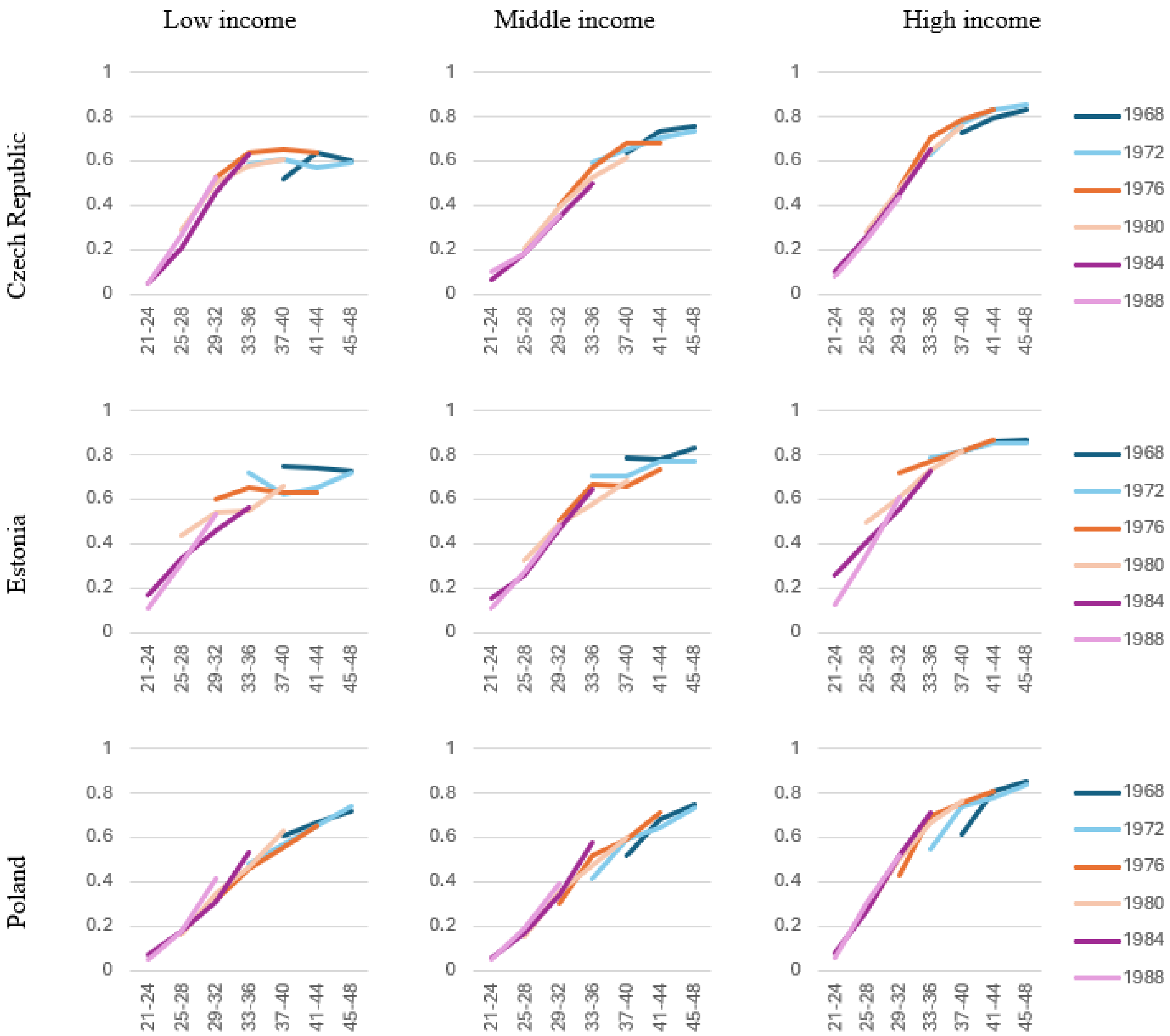
		36-40	-12.3%	-7.7%	-0.6%
		41-45	-19.0%	-10.4%	-3.6%
	LT	26-30	23.8%	5.2%	12.9%
		31-35	16.0%	12.8%	9.0%
		36-40	14.5%	3.9%	4.6%
		41-45	-0.8%	-4.3%	1.1%
	LV	26-30	2.3%	-5.9%	-6.1%
		31-35	14.5%	3.6%	2.6%
		36-40	3.4%	1.5%	4.5%
		41-45	-3.4%	0.9%	1.2%

Note: Limited country-years available for Bulgaria (2007-2023)

For the cohort analysis in Eastern-Europe we select three countries that represent the three types of changes identified in the age-group analysis above: stability in the Czech Republic, a stratified decline in access in Estonia, and a stratified increase in homeownership in Poland. Profiles of the remaining countries can be found in Supplementary Database B. Homeownership in the Czech Republic is marked by relative stability, which is also evident in the similarity of homeownership transitions between cohorts. For each income group, homeownership rates largely correspond to those of previous cohorts. Notably, this stability in homeownership itself does not preclude other trends more relevant to the Eastern-European context, such as stratification in terms of housing quality, housing location, and housing satisfaction (Gerber, Zavisca & Wang 2022; Soaita & Dewilde 2021). Nonetheless, while exacerbating wealth inequality in North-Western Europe, the family inheritance of housing wealth has been argued to be a stabilizing factor in the wealth distribution in the Czech Republic (Lux & Sunega 2023).

In Estonia, the stratified decline in homeownership found in Table 3 seems to be driven in part by delayed homeownership transitions due to the GFC. The homeownership rate of low incomes born between '72-'75 has dropped but also recovered, with 62.1 per cent owning a home at the age of 37-40 and – much like the prior cohort – 71.7 per cent owning a home at the age of 45-48. Similarly, while homeownership rates of low incomes are lower for almost every successive cohort at the age of 29-32, these differences disappear at later ages. For example, compared to those born between '76-'79, homeownership in the cohort '80-'83 is 6.6 per cent lower at the age of 29-32 but 2.9 per cent higher at the age of 37-40. This pattern of delay and catching up is also found in other cohorts during and after the GFC. Nonetheless, the homeownership rates of the cohort '68-'71 are unlikely to be attained especially by the cohorts that reached young adulthood during the GFC, showing that the recovery of homeownership rates after the GFC is not complete for low incomes. As can be found in Supplementary Database B, Estonia is rather unique in terms of homeownership stratification even amongst the Baltic states, despite similarly radical housing market reforms after the fall of the Soviet Union (Kährik, Kangus & Leetmaa 2019; also see Kährik & Pastak 2023).

Figure 4.Change in homeownership rates between cohorts in Central-and-Eastern-European countries



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In Poland, the cohort analysis suggests that the pattern of stratified growth identified in the age-group analysis (Table 2) is driven by a change in timing, i.e. homebuying at a younger age. As shown in Figure 4, high incomes move into homeownership eventually at the same rate but at earlier ages compared to prior cohorts. For example, an estimated 54.8 per cent of the high-income cohort '72-'75 was a homeowner by the age of 33-36, while of the high-income cohort '84-'87 already 70.8 per cent attained homeownership at this age (see also Supplementary Database B). For low incomes, fitting the pattern of stratified growth, the rate of homeownership at the age of 33-36 increases with a more modest 4.8 per cent, from 48.3 per cent for those born between '72-'75 to 53.2 per cent for those born between '84-'87. In Poland, instead of delaying homeownership, young people are speeding up their transitions into homeownership, undoubtedly fuelled by strong economic growth and the corresponding income gains. While it is possible that the homeownership rates of younger cohorts will eventually surpass those of prior cohorts, we cannot know for sure until the time series of younger cohorts is more completely observed.

In sum, homeownership transitions in Central-and-Eastern Europe are varied, ranging from (apparent) stability to growth and stratified decline. Whereas homeownership is declining, delayed and increasingly income-stratified in countries such as Estonia, Slovakia and Slovenia, Poland is experiencing a stratified increase in homeownership driven by a speeding up of homeownership transitions. In Lithuania, notwithstanding underlying inequalities in quality and location, homeownership is on the rise especially amongst low incomes, suggesting the de-stratification of homeownership.

4.3 Southern Europe

Homeownership rates in most Southern European countries are also declining for all age and income groups, but especially for low incomes at later ages. This mix of generational decline and increased income stratification of homeownership is most clearly visible in Cyprus, Spain, Italy and Malta, and is even more drastic than what we observe in e.g. Denmark and the Netherlands. For example, in Cyprus, homeownership at the age of 36-40 dropped by -21.2 per cent for low incomes and -8.3 per cent for high incomes. Whereas 69.0 per cent of low-income Cypriots owned a home in 2005, this

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dropped to 42.3 per cent in 2023 (see Supplementary Database A). Homeownership amongst middle- and high-income Cypriots is also declining, even at later ages, but to a much lesser extent. In Spain too, to name another example, declines in homeownership are both generational and stratified by income. At the age of 36-40, homeownership rates amongst low-income Spaniards are -23.8 per cent lower in 2021-2023 compared to the pre-GFC rate. For high incomes aged 36-40, the decline in homeownership rate is about half the size, but still substantial, at -12.4 per cent. Similar patterns of stratified decline are visible in Malta and to a lesser extent Italy, suggesting that homeownership is increasingly difficult to obtain in most of Southern Europe for all income groups, but especially for low incomes. These trends suggest increasing market pressures on the familial provision of housing, traditionally deemed “unrelated to income” (Minas, Mavrikiou & Jacobson 2013:13, but see Alexandri & Janoschka 2018:121). Simultaneously, however, generational declines may point to a shift in cultural preferences from homeownership to rental tenures, i.e. the avoidance of mortgages, as a response to housing market risks exposed by the GFC (Fuster, Arundel & Susino 2019; see also Pareja-Eastaway & Sanchez-Martinez 2017). Especially in Spain, such a change in preference would be facilitated by a growing private rental sector and a contemporary policy environment favouring rental tenures.

Two countries do not fit this pattern of generational and stratified decline in homeownership. In Greece, homeownership rates are declining equally or even more strongly for high incomes pre- and post-GFC, pointing to a generational decline in homeownership rates. Looking at the ages 36-40, homeownership declined by -23.4 per cent for low incomes and -22.1 per cent for high incomes. At the ages 41-45, homeownership declined even more strongly for high incomes (-21.5%) compared to low incomes (-15.4%). Welfare austerity measures combined with strong tax increases implemented after the GFC seem to have impacted low- as well as high-income Greeks, presumably leading to dispossession of homes in all income groups (see also Alexandri & Janoschka 2018), or perhaps indicating a loss of faith in housing as an asset amongst high incomes. Homeownership in Portugal is also declining across income groups, with some variation between age groups. The systematic income-stratified declines in homeownership observed in Spain are much less obvious in Portugal, despite a similar

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tenure structure marked by relatively high rates of mortgaged (rather than outright) homeownership (e.g. Flynn & Montelbano 2024). In younger age groups, the declines in homeownership rates are roughly similar for low and high incomes. At the ages 36-40, high incomes show greater declines in homeownership, while at the ages 41-45 high incomes are slightly more often homeowners compared to the pre-GFC situation. The variation between age groups is difficult to interpret.

Table 4. Difference in homeownership rates before 2008 and after 2021 in Southern Europe

			Low	Middle	High
	CY	26-30	-20.1%	-21.4%	-22.4%
		31-35	-30.7%	-22.1%	-21.9%
		36-40	-21.2%	-6.5%	-8.3%
		41-45	-17.7%	-3.4%	-5.1%
	EL	26-30	-10.8%	-6.9%	-7.3%
		31-35	-23.8%	-13.1%	-16.2%
		36-40	-23.4%	-16.8%	-22.1%
		41-45	-15.4%	-6.9%	-21.5%
	ES	26-30	-13.6%	-14.5%	-17.5%
		31-35	-22.6%	-12.3%	-15.6%
		36-40	-20.9%	-9.0%	-12.4%
		41-45	-16.0%	-1.0%	-4.5%
	IT	26-30	-5.0%	-5.1%	-9.8%
		31-35	-6.0%	-5.3%	1.4%
		36-40	-11.1%	-5.2%	-3.7%
		41-45	-12.0%	-5.0%	0.0%
	MT	26-30	-33.5%	-4.7%	-4.5%
		31-35	-29.9%	-5.8%	-10.0%
		36-40	-24.3%	-12.3%	-6.2%
		41-45	-18.6%	-1.5%	-2.1%
	PT	26-30	-8.2%	-5.3%	-5.0%
		31-35	-13.0%	-10.7%	-16.2%
		36-40	-5.9%	-7.2%	-11.3%
		41-45	-10.2%	0.4%	4.6%

Note: Limited country-years available for Malta (2007-2022)

While the age-group analysis suggests that, like elsewhere, high-income young adults in some Southern-European countries are delaying homeownership transitions, the cohort analysis in Figure 5 indicates that also high incomes are less often homeowners even at later age. The most emblematic example is Greece, where 57.9 per cent of high incomes born between ’72-’75 owned a home at the age of 37-40, while just 37.8 per cent

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of the '80-83 cohort owned a home around the same age. This decline is similar to their low-income counterparts: of those born between '72-'75, 50.7 per cent owned a house at the age of 37-40, while homeownership in the cohort '80-'83 is at 35.4 per cent. The cohort decline in homeownership amongst high incomes (-20.2%) is even larger than for low incomes (-15.3%), suggesting that – unlike in the social-democratic unitary rental market countries – a lack of capital is not the main explanation for the reduction in homeownership. Instead, a change in preferences or a loss of faith in housing as a container of wealth seem more applicable. Alternatively, the reduction in homeownership rates amongst high-income Southern-Europeans may be driven by migration: high income natives may be increasingly willing to migrate, foregoing homeownership in their country of birth.

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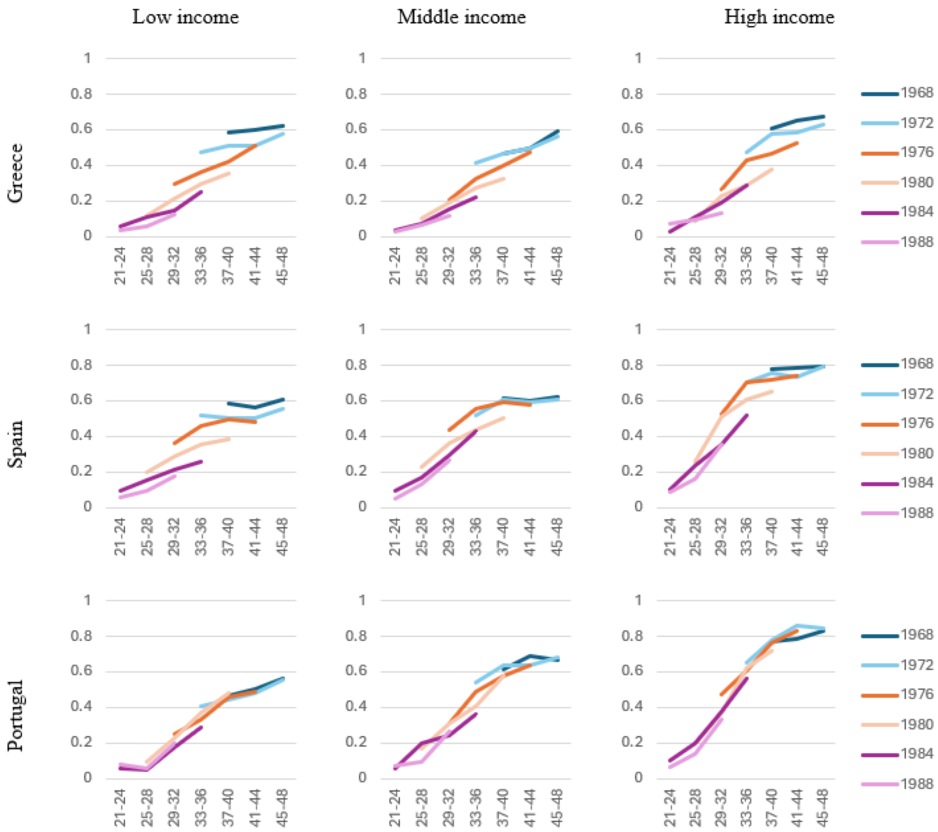
Figure 5.Change in homeownership rates between cohorts in Southern-European countries



Note: Colours roughly correspond to periods, pre-GFC (purple), peri-GFC (orange) and post-GFC (blue). See Table 1 for details

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A similar tendency is visible in Spain. At the age of 37-40, the difference in homeownership rates between the cohorts ‘72-’75 and ’80-’83 is -11.7 per cent for low incomes and 10.7 per cent for high incomes. Whereas homeownership seems to speed up somewhat for the youngest two high-income cohorts in Spain, no such indication is visible amongst low incomes. Thus, at the age of 33-36, only 25.6 per cent of low-income Spaniards in the ’84-’87 cohort owned a house, compared to 51.6 per cent in the ’72-’75 cohort. This homeownership gap between cohorts is only slightly smaller for high incomes, where 70.0 per cent of the ’72-’75 cohort owned a home around the age of 33-36, compared to 51.4 per cent for the ’84-’87 cohort. Though not reported here, similar tendencies are found in Cyprus, as can be seen in Supplementary Database A. Again, while true motives are impossible to derive from this analysis, the suggestion is that homeownership seems to be losing its appeal in several Southern-European countries.

In Portugal, on the other hand, much like in Italy (see Supplementary Database A), homeownership rates are fairly stable across successive cohorts. Interestingly, it is the Portuguese middle classes that seem to forgo homeownership more so than the lower or upper classes. Amongst high incomes, at the age of 33-36, homeownership rates are largely similar across cohorts, falling from 65.1 per cent (’72-’75) to 56.6 per cent (’84-’87), a difference of -8.5 per cent. The homeownership gap is slightly larger for low incomes, with 28.8 per cent of the ’84-’87 cohort being homeowners compared to 40.6 per cent of the ’72-’75 cohort (-11.9%). For middle incomes, homeownership rates at the age of 33-36 decrease with 18.1 per cent, from 54.1 per cent in the ’72-’75 cohort to 36.1 per cent in the ’84-’87 cohort (-18.1%). While the large homeownership gap for middle incomes may still diminish as the youngest cohorts come of age, from a stratification perspective it is remarkable that such a gap emerges amongst middle- but not lower incomes.

In sum, it seems that in several Southern-European countries the decline in homeownership is generational, rather than stratified along the lines of income. The foregoing of homeownership amongst high incomes even at later ages suggests that these declines are not driven by purchasing power, instead pointing to changing preferences (i.e. an aversion to banks and mortgage debt) and possibly migration patterns as driving mechanisms.

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5. Conclusion and Discussion

In this report we have profiled the re-stratification of homeownership in 29 European countries over the period 2005-2023, with particular attention for the delays in homeownership transitions and the positions of the middle classes.

The re-stratification of homeownership is accelerating in social-democratic unitary rental market regimes, with income-differences in Denmark, the Netherlands, and Sweden now matching or even surpassing the degree of income-stratification found in dualist rental market homeownership regimes such as the UK and Ireland. The Global Financial Crisis (GFC) affected homeownership rates in many countries. However, while high incomes in North-Western European countries managed to restore or even heighten their access to homeownership after some delay, low incomes have been durably excluded from homeownership. Moreover, this pattern of re-stratification is further exacerbated by an increasing exit from owner-occupation amongst low incomes at later ages in social-democratic countries. While speculative, we suspect that this exit could be due to divorce or the dissolution of relationships at later ages, at which point low-income singles are unable to remain in homeownership. Since before the GFC, homeownership has decreased by around 15 to 20 per cent amongst low incomes in North-Western Europe even at later ages. Apparently, the financialization of housing and pro-homeownership policies have had particularly detrimental effects in countries with high levels of income protection (Lennartz & Ronald 2017; Tranøy, Stamsø & Hjertaker 2021; Cristophers 2021). These developments definitively lay to rest the original conception of social-democratic unitary rental markets as having competitive rental markets (Kemeny 1995), especially when considering the simultaneous downscaling and low-income targeting of social housing (Angel 2023). Without policy interventions that favour access to homeownership for low incomes, (housing) wealth inequality will grow substantially in the social-democratic welfare states over the coming generations. In many countries in North-Western Europe, homeownership is indeed increasingly becoming an elite privilege.

In Central- and-Eastern Europe and the Baltics, the re-stratification of homeownership is surprisingly apparent as well. On the one hand, in Estonia, Slovenia, and to a lesser

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extent Slovakia, homeownership rates are developing similar to social-democratic welfare states: a decline in homeownership that affects mainly (if not exclusively) lower incomes. On the other hand, while homeownership is on the rise in Poland, this growth is stratified in the sense that high incomes are moving into homeownership faster than low incomes. It seems that homeownership per se is an increasingly relevant aspect of housing inequality in some CEE- countries, next to the recognized inequalities in location and quality of accommodation (Gerber, Zavisca & Wang 2022; Soaita & Dewilde 2021).

In Southern-Europe, especially in Spain and Greece, it seems that the political consequences of the GFC have affected the popularity of homeownership across the population. Our analysis shows that high incomes are as likely to forgo homeownership as low incomes, with a substantial reduction of around 20 per cent between cohorts in late adulthood, suggesting that the shift away from homeownership may not be a matter of purchasing power. While Alexandri and Janoschka (2018) framed the political corruption and increasing tax pressures following the GFC as benefitting the rich, it seems as if high incomes have not benefitted either and increasingly refrain to invest their incomes in housing assets (Fuster, Arundel & Susino 2019). Simultaneously, in Spain, it could be that the policies to promote rental tenures have been successful to the extent that they attract both low- and high-income tenants. In any case, the move away from homeownership for high incomes is a significant departure from the homeownership ideology that historically characterized these countries.

Finally, we find that the position of middle incomes in the attainment of homeownership changes in one of two ways: erosion and growth of middle-class homeownership. These changing positions of the middle classes vary also within and across housing regime types and vary more-or-less independently of the position of low incomes across countries. First, middle-income homeownership is eroding when homeownership rates are stable for high incomes but decreasing for middle incomes. This is the case in Sweden, Norway, Denmark, and Ireland but also Estonia, Slovakia, and Slovenia. Middle-income homeownership is growing when homeownership rates are increasing for middle incomes while decreasing for low incomes. This situation represents broad access to homeownership combined with an increasingly disowned underclass.

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This is the case in Luxembourg and France, and also in the Netherlands (cf. Howard, Hochstenbach and Ronald 2024). In the Netherlands, the stratification of homeownership is unique to the extent that only low incomes seem to be durably excluded from homeownership. Arguably, in countries where middle-class homeownership is growing, there is less political ambition to implement policies that curb the stratification of homeownership, as voters may punish parties that try to change the situation. In countries where middle-class homeownership is eroding, on the other hand, the policies are likely to be much more popular.

The following limitations of the current analysis should be kept in mind when interpreting the results. First, the cohort analysis pools repeated waves into cohorts and age-groups, including the repeated observations of the EU-SILC rotating panel component (e.g Wirth & Pforr 2022). This means that respondents in the panel component are repeatedly included in the same age-income-cohort as long their age- and income-categorization remains the same across years, which is the case in about 8.9 per cent of cases. Since these cases are arguably duplicated at random, however, they are unlikely to bias our estimates of homeownership transitions. Second, housing inequalities are not just about access to homeownership, but also about location and quality. For example, differences between rural and urban areas are highly relevant for the stratification of homeownership. Many urban areas are disproportionately affected by house price inflation, excluding prospective low- and middle-income buyers (and renters) from urban centres. Similarly, inflated property values may force especially low incomes to buy properties that need renovation with limited budgets. Such alternative aspects of inequality are unobserved by this analysis, leading to an underestimation of inequalities within the category of homeowners.

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