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Rental sector liberalization and the housing outcomes for young urban adults

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Abstract

Young adults increasingly rely on more precarious and costly rental housing, particularly in major cities. This problem is often defined in terms of the decline in homeownership rates amongst younger cohorts, with little attention paid to the roles of other tenures. While most studies focus on Anglophone contexts with deeply liberalized housing sectors, Amsterdam (the Netherlands) has a more regulated housing system with rent regulated homes still constituting the largest sector in the city. However the increasing influence of market-liberal logic in policy has led to substantial growth of liberalized rental housing. Where this growth was justified as a way to fill the middle segment, our findings reveal that affluent young households make up the biggest share and the largest growth in the sector, whilst less affluent households struggle to gain access. Drawing on the city of Amsterdam survey data from 2005-2019, our analysis considers how recent policy and housing market shifts, accumulating in an expansion of the liberalized rental segment, have generated and shaped housing inequalities for young adults. We argue that 'generation rent' is not a one-size-fits-all outcome of market-liberal agendas, but is mediated and shaped on a city scale, in part through rental market restructuring.

Key words: *Generation rent; social housing; private rental sector; urban inequality; intergenerational inequality*

Introduction

Over the last two decades, shifting economic and housing market conditions have resulted in greater shares of young adults depending on often precarious and more costly rental housing arrangements, especially in major cities (Lennartz et al., 2016; Flynn, 2020; Byrne, 2019; McKee, 2012; Hoolachan, McKee, Moore, & Soaita, 2017). This development has been most conspicuous across economically liberal anglophone countries like Australia, the UK, Ireland and the US where strong intergenerational and socio-economic divides have emerged in housing conditions and wealth accumulation practices. Debates around contemporary restructuring in housing market opportunities have been dominated by these countries, and discourses surrounding 'generation rent' subsequently have centered on diminishing home ownership rates among post-1980 birth cohorts. They have assumed minimal social-rental alternatives, and emphasized a growing private-rental sector characterized by poor quality, limited tenant protection and increasing rents (Coulter, Bayrakdar & Berrington, 2020; Preece, Crawford, McKee, Flint & Robinson, 2020). The problematization of an emergent 'generation rent' therefore rests upon, and reinforces, the view of homeownership as the desirable tenure.

However in the last few years, market-liberal restructuring has extended past anglophone and economically liberal contexts and intergenerational divisions have become more pronounced in a greater diversity of countries (see Fuster, Plosser, Schnabl & Vickery, 2019; Grander, 2021). In the Netherlands, despite a long history of social and affordable housing provision, young adults' increasingly find themselves reliant on more expensive and insecure liberalized rental housing. Access to social housing has become more stringent and homeownership has begun to decline, but these changes have happened in the context of a highly regulated tenure structure (Hochstenbach & Arundel, 2021; Hoekstra & Boelhouwer, 2014). Large cities, like Amsterdam, have been particularly affected due to intense post-crisis price increases, but also an emerging political agenda focused on expanding the rent-liberalized tenure through market-liberal policies targeted at younger, middle income groups caught between shrinking owner-occupied and social rental tenure sectors (Hochstenbach, 2018). Amsterdam's rent-liberalized sector has, consequently, tripled in size over the last decade, while temporary rental contracts have become the most common type among those aged under 25 (Hochstenbach & Ronald 2020; Huisman & Mulder, 2020).

Rapid housing market transformation in a previously socially rented city makes Amsterdam a provocative case for considering the impacts of housing market-liberalization on young urban adults. Looking at Amsterdam highlights the subtle, yet important, distinction between the decline of homeownership and an emergence of 'generation rent'. Undertaking this analysis on the city scale shows how the rental sector has been reconfigured through national and local policies on both the long and the short term. We draw on the municipal, large-scale biannual household survey (Living in Amsterdam, WiA) for the 2005-2019 period to address the institutional restructuring of Amsterdam's rental (rent-regulated, rent liberalized, and temporary rent) and owner-occupied tenures over time. This data enables us to look at young adults in the liberalized rental sector through variables such as income, household composition, and housing affordability.

This paper contributes to current knowledge in three ways. First, whereas most studies contrast 'generation rent' in Anglophone countries with more fair and just rental regulation in continental

Europe (e.g. Byrne, 2020), this study emphasizes the emergence of cohort based housing inequalities in a more social democratic, welfare rich and highly regulated housing context. In doing so, this paper brings together literature on generation rent and the political economy of rental housing, engaging with academic debates around the shifting housing opportunities of young urban adults over recent decades. Second, while most studies address the national level, this study highlights the salience of city based analyses where competition for scarce housing is typically strongest and tenure restructuring most pronounced. Third, moving beyond a narrow generational lens, this study unravels more precisely which populations are becoming more dependent on the growing and increasingly unaffordable, rent-liberalized housing sector, highlighting disparities both between and within generations. In doing this we contribute to a growing body of scholarship which emphasizes the classed nature of housing inequalities amongst young people (Byrne, 2020; McKee, 2012; Coulter et al., 2020; Christophers, 2019).

This paper proceeds from an examination of the emergence of post-war rental sectors, their subsequent realignment, and how this has structured housing opportunities over time. We consider transformations across other high income economies, asking how the Netherlands has lined up with international trends. It moves onto our case, Amsterdam, and addresses major shifts in housing policy and tenure structure, culminating in both the revival and transformation of the private rental sector and the growth in the rent-liberalized segment. The main part of the paper draws on city-level household data to analyze how these shifts have created different housing opportunities across generations and social groups, with shifting outcomes for young adults aged 25-34. Our empirical focus analyzes who is living in the sector and how this has changed over the last two decades, charting these shifts in the context of broader housing and policy reforms. Our conclusion suggests that these reforms have ultimately resulted in a more expensive rental stock which has become more concentrated with young, affluent, typically dual income households. Younger less affluent households, singles and those with non-western migration backgrounds, we found, are increasingly excluded from the city.

The death and life of private renting

Housing market restructuring

During the latter half of the twentieth century, private rental sectors were in decline across most high income economies (Crook & Kemp, 2014). This followed the rise of post war social housing programs and, later, the widespread growth of homeownership, which in 1998 also became the majority tenure in the Netherlands. In the early 2000s, however, the decline of private renting began to reverse across societies, largely as a result of transformations in other tenures. Social housing was stripped back in many countries as part of the roll out of homeownership. Market liberal policies saw the gradual transformation of the tenure from a mass housing model to a means of provisioning for the lowest-income households (Forrest & Murie, 1983). This transition was advanced by countries like the UK (Malpass, 2004), and later by the Netherlands (Hoekstra, 2017; Van Gent & Hochstenbach, 2020).

While access to affordable rental housing has diminished, house prices have also increased beyond what is affordable for most middle and even many high income young adults (Ryan-Collins, Macfarlane & Lloyd, 2017; Aalbers, Hochstenbach, Bosma & Fernandez, 2020). This follows from high demand, state subsidies, large pre-GFC mortgages, and increasingly low interest rates and speculative wealth investments, which have rendered homeownership inaccessible for those that do not earn a high (dual-earner) income, do not have substantial wealth at their disposal or do not meet the more stringent post-GFC mortgage criteria (Forrest & Hirayama, 2015; Lennartz, Arundel & Ronald, 2016). Although owner-occupied sectors have been massively expanded, they have also become increasingly unaffordable and exclusionary. Where the Dutch homeownership rate rose from 45% to 57% between 1980 and 2010 (Boelhouwer & Priemus 2014) it has plateaued since. Amongst younger adults who typically have limited access to financial assets or stable employment, the drop in homeownership rates have been particularly steep (Forrest & Hirayama, 2015). In the Netherlands overall, homeownership among 18 to 39 year olds dropped from over 53% in 2011 to around 46% in 2018. The drop was particularly pronounced among low-income young adults and in larger cities (Hochstenbach & Arundel, 2021). A widening gap emerged between the social-rental sector increasingly reserved for lower-income households, and owner-occupancy catering to prime households. Rather than attempting to close this gap, both state and market actors have reinvested in the private rental sector as a means to house squeezed middle-income populations.

Rental housing as an investment asset

In many countries, private rental growth has been spurred by direct policies but also indirectly, through diminishing the rights of tenants (Kemp, 2015). Rental sectors have become increasingly profitable, attracting all different sorts of investors. Even in the Netherlands, a country with traditionally strong tenant protection, policy reforms have strengthened landlord power through reducing rent controls and diminishing security of tenure (Huisman, 2016).

Across high income economies, private rental growth has been further spurred by the influx of investors. This began in the 2000s but accelerated rapidly after the GFC when private rental investment became perceived as a safe choice for high profits and safe rates of return (e.g. Fields, 2018; Wijburg, Aalbers & Heeg, 2018). International trends pertaining to low interest rates paired with reduced yields on other assets have also enhanced the appeal of rental real estate as an asset class (Van Loon & Aalbers, 2017). Asset-rich individuals have capitalized on unprecedented housing equity gains, buy-to-let mortgage products, and favorable tax regulations to buy property to rent out (Ronald & Kadi, 2018; Aalbers et al., 2020). Such purchases do little to increase overall supply, but merely shift units from one tenure to the other. In the Netherlands, the majority of landlords are small in scale, holding just one or two properties (Hochstenbach, 2021). Large scale investors including financial firms and institutions have also become important players in rental markets, including, more recently, in the Netherlands. These investors are considered more 'aggressive' than typical small scale landlords, demanding higher rates of return which can have a knock on effect on driving up rental prices across the board (August 2020; Van Loon & Aalbers, 2017; Beswick et al., 2016). The nature of rental real estate and the influence of investors in the Netherlands, and particularly in Amsterdam, is changing.

Socio-economic changes

As post-crisis lending criteria have become more stringent, labor market conditions have become a major obstacle for many trying to obtain a mortgage (Lersch & Dewilde, 2015). Unemployment, stagnating wages, increased labor mobility, and precarious, part time or short term work contracts pose a barrier to homeownership, particularly for young and less affluent households. Dutch workers have particularly high rates of flexible contracts compared to their EU counterparts (Wigger, 2020), translating to lower salaries, weaker employment protection, lower resilience in the face of illness and, particularly, challenges obtaining a mortgage. The outsider position of these persons on the labor market translates into a similar outsider position on the housing market (Arundel & Lennartz, 2020). Furthermore, young adults typically have little assets at their disposal, and are thus easily outcompeted by current owners, investors and buy-to-let landlords that do (Neuteboom & Brounen, 2011; Forrest & Hirayama 2015). These trends exclude young adults from owner-occupancy, generating extra demand – albeit by constraint – for more readily accessible private rental housing.

Life course trends are also linked to private rental growth particularly amongst younger groups. The transitional phase preceding normative markers of 'adulthood' has extended for many, as young people stay in education longer, couple, marry and have children later, work and travel more and stay in insecure or temporary employment for extended periods (Ley, 1996). This extended transitory life period has particular spatial dimensions, often playing out in major urban centers and university cities (Buzar, Ogden, & Hall, 2005). These life-course transformations have not only generated extra demand for urban living in general, but for *urban private rental housing* specifically (Hochstenbach & Boterman, 2018). This demand has been further exacerbated by increased migration, particularly to big cities (e.g. Hulse, Burke, Ralston & Stone, 2012).

The case: Amsterdam's housing market

Scholarly debates about intergenerational inequalities in the housing market center around diminished access to homeownership, and how this has created a generation reliant on, and largely exploited by, the private rental sector. Whilst these are undoubtedly related, we argue that decreased access to owner occupancy and increased dependency on private rental housing are two separate phenomena, albeit closely related. Alongside these is a third important factor mediating local outcomes: the structure of the rental system. Rental markets have been actively transformed by market-liberal agendas, urban politics and the restructuring of global capital around rental real estate since the GFC. We argue that this transformation is an important factor in explaining the production of intergenerational inequalities in housing. While the previous section considered how private rental demand has been fueled across high income economies, in the following we turn to our case, Amsterdam, to examine how the rental sector has been revived and reconfigured through national and local policy agendas, and longer-term housing market restructuring. From there we go on to analyze the specific outcomes in terms of the shifting constitution of, and emerging inequalities in, Amsterdam's multilayered rental system.

Rental sector restructuring

Between the 1940s and 1980s, social housing accounted for nine in ten residential units built in Amsterdam (Fainstein, 2010), creating a large decommodified social-rental sector which housed a broad cross section of Amsterdam's population (Kadi & Musterd, 2015; Uitermark, 2009). Amsterdam became frequently cited as an exemplar 'just city' (Fainstein, 2010), and a prime example of "diversity, equality and accessibility for all" (Van Duijne & Ronald 2018, p.641). However, since the 1990s the regulated rental housing sector, largely made up of units owned by not-for-profit social housing corporations, has been diminishing whilst liberalized housing has been growing, driven by both national and local government interventions.

Rental housing in Amsterdam, as in the Netherlands overall, is bifurcated into a *regulated* and *liberalized* sector. In the former, rents are calculated based on a universal point system. Maximum rent has traditionally been calculated on square meterage and standard of amenities irrespective of whether a property was rented by a not-for-profit housing association or private landlord, and irrespective of market property value or location. Rent increases, allocation procedures and contract conditions are determined by state guidelines[1]. In the mid-nineties, around 85% of Amsterdam's rental housing was still rent regulated with not-for-profit housing associations owning almost 60% of the total stock (Boterman & Van Gent, 2014).

In the early 1990s, a liberalization threshold was introduced: rental units of sufficient quality – i.e. scoring enough points – could be shifted from the regulated to the market sector, where rents were freely determinable by the landlord. Nonetheless, even after the introduction of this liberalization threshold, the vast majority of rental units both locally and nationally would remain rent regulated. While the municipality had resisted changes to the points system, in 2011, the national government – led by the more economically liberal leaning Rutte coalition elected a year earlier – changed the point-based rent system, assigning extra points to rental units in the Amsterdam region (*Donnerpunten*). This enabled more units to be shifted from the regulated to the liberalized sector. In 2015, this was further fine-tuned by adding market value to the points system, replacing the Donn. Prior to these policy shifts, 'converting' property from the regulated rental to the liberalized rental sector typically required expansions or improvements. Since this policy change, however, the vast majority of properties in high price locations (including large parts of Amsterdam) score enough points to be excluded from the regulated-rental sector based on property value. This means that once the sitting tenant moves out, properties are converted from social rent to liberalized rent. This has also made private rental investment considerably more profitable and, in turn, more attractive to both small and large scale investors. In 2003, only around 1% of housing-association units and 18% of private-rental units in Amsterdam were liberalized. In 2019 this had increased to 8% and 54% respectively (Hochstenbach & Ronald, 2020).

This change was part of a broader ambition by local and national governments to reduce the share of social housing. From the mid-1990s, the national government discontinued direct support for housing associations, encouraging them to operate more like market players (Van Kempen & Priemus, 2002). Changes since this point, such as the annual 'landlord levy' (verhuurderheffing) introduced in 2013 only to be paid over social-rental units, has further curtailed housing associations' investment capacity. Decreases in social housing supply were paired with regulatory shifts which sought to further limit demand. In 2011, a gross household annual income threshold was introduced for the large majority of social housing stock, which in 2019 stood at 38,035 euros for 80% of social stock. While these income limits restrict access, increasingly scarce supply still drives waiting lists. In Amsterdam, the number of housing association units dropped from 205,000

[1] As of 2019, all regulated units have a determined monthly rent below 720 euros (subject to annual changes).

at its peak in 2002 to 179,000 in 2020, from 55% to 40% of total stock. In 2007, average social-rental waiting times stood at six years for starter households and fourteen years for tenants moving within the system, but have since increased to ten and eighteen years respectively. This makes the tenure essentially unfeasible for young households and newcomers without priority access.

Like elsewhere, Dutch mortgage lending criteria has tightened and house prices have continued to rise. In Amsterdam, inflation-corrected sale prices increased from an average of 170,000 euros in 1996 to 367,000 euros in 2008. After a steep drop following the GFC, average house prices went back to 280,000 euros in 2013, but accelerated to over 510,000 euros by 2020. Policymakers and politicians, initially at the local level and later nationally as well, became concerned about population groups falling between owner occupancy and regulated rental housing (Hochstenbach & Ronald, 2020). These included middle income households earning either too little (for social rent) and too much (to buy), young adults, and flexible populations such as temporary (knowledge) workers and newcomers to the city looking for easily accessible housing. Like elsewhere, Dutch policy shifted focus onto expanding the rent-liberalized sector to fill this gap.

The growth of the rent-liberalized sector

Private-rental growth has taken place across the country, but is concentrated in the larger cities (Aalbers et al., 2020). From the Second World War up until the GFC, the Amsterdam private-rental sector had been in decline. Between 2000 and 2008, the number of private-rental units in the city dropped from 113,000 to 92,000. Since then, however, the tenure has experienced a remarkable return to growth. In 2020 there were 135,000 private-rental units in the city, 43,000 more than in 2008, increasing in share from 24% to 30%. Where demand follows decreasing access to other tenures, this has also been spurred by multiple policy and regulatory changes directly seeking to expand the private-rental sector.

As regulations have been liberalized, Amsterdam's rental market has become increasingly profitable and, like more liberalized contexts, transformed to a place of investment for affluent individuals, institutions and firms (Aalbers et al., 2020). Most notably, this follows changes to the points system, discussed above, and the introduction of temporary contracts. Where permanent contracts used to be the norm, since the 2016 housing act the national government has permitted one or two-year contracts in the rent-liberalized sector, increasing investment appeal in rental housing (See Huisman, 2016). With increased profitability and capacity for tenant turnover, buy-to-let purchases have rapidly increased from 16% in 2009 to 28% of all home purchases in 2019. This was significantly higher than the national levels, which increased from 10% to 15% over the same period (Aalbers et al., 2020). Large institutional investors have found their way to Amsterdam as well, with major foreign players like Blackstone buying up portfolios of existing housing in the city – a trend that was actively encouraged by national government (Aalbers et al., 2020).

Amsterdam city government has also sought to increase the share of rent-liberalized housing in new developments. Owning the vast majority of the city's land, the municipality has considerable control over housing that gets built. Before the GFC, standard policy for larger projects was to include 70% owner occupation and 30% social rent. Up until 2012, the annual construction of rent-liberalized units in the city remained firmly below 1000, constituting 5 to 20% of new constructions. Coming out of the crisis and following a slump in housing production, the city government increased this share to about a third of total production which reached over 50% in 2019 when 3800 out of 7100 newly constructed dwellings were rent-liberalized. The number of new rental units have typically increased in relation to the declining number of owner-occupied units (Ronald & Kadi, 2018). In Amsterdam, however, the volume of owner-occupied units has continued to climb, just at increasingly diminishing rates. The growth of the liberalized rental sector in Amsterdam, then, is particularly notable in this regard.

The shift towards *private* and *liberalized* rental housing can be considered a state-led restructuring accommodated by local and national policy. It set in motion a notable growth of these rental tenures with the aim to house specific populations excluded from the other dominant tenures, such as young adults, flexible newcomers, and middle-income households. The key question, then, is which populations the rapidly growing rent-liberalized sector actually caters to? Is it to the young middle income earners squeezed out of other tenures, or do we see other patterns?

Data and variables

Data

To understand demand for rent-liberalized housing, whether by choice or constraint, we draw on "Living in Amsterdam" (*Wonen in Amsterdam*, or *WiA*) survey data. This is a biannual household survey carried out by the housing department and statistics department of the Amsterdam municipality. We focus on Amsterdam (863,000 residents in 2019), whose administrative boundaries have remained stable over the study period. Each survey wave has around 18,000 respondents, and is supplemented by additional housing and population register data. The survey is representative for the Amsterdam household population with additional weights correcting for over and underrepresentation. The survey is cross-sectional in design, meaning it's not possible to follow respondents over time. A crucial advantage of these survey data sets over full-population register data is that they contain detailed information on rent levels and rental contract type. We report 95% confidence intervals when presenting the data. We use data from the 2005 to 2019 survey waves, as older waves are not as directly comparable. More substantively, it was only after 2005 that the revival and liberalization of private renting kicked in. At the time of writing 2019 is the most recent wave.

Variables

We are primarily interested in the (changing) distribution of households over housing tenures. As explained above, the Dutch housing stock can be divided into ownership categories (owner occupied, housing association, private landlord) and rental units can further be classified as rent-regulated or rent-liberalized, with monthly rents respectively below or above the 720 euro mark (2019 figure). There are then five main tenures: (1) owner occupied; (2) regulated housing-association rent; (3) regulated private rent; (4) liberalized housing-association rent; and (5) liberalized private rent. For the sake of simplicity, in this paper we follow a threefold categorization of owner occupation, regulated rent and liberalized rent. Another substantive argument is that the liberalized segment serves the same purpose, regardless of ownership. A more practical argument is that the liberalized stock in housing association ownership went from virtually non-existent to rather small, making reliable analyses with survey data difficult. Households with missing tenure information (2.1% in 2019) are excluded from all analyses.

Another housing variable is contract type. Although most tenants have a permanent rental contract, we can also distinguish several types of temporary contracts: (1) campus contracts for students which expire six months after deregistering from university, (2) five year youth contracts where the tenant has to be 18 to 27 upon signing the contract, and (3) one or two year rental contracts introduced in 2016.

A key household variable in our analyses is age, where we define four age categories (based on household respondents): 25-34, 35-44; 45-64 and 65-74. Adults aged 18-24 or 75+ are not analyzed as a separate category but included in totals. Our focus is on the 25-34 year old cohort, which can broadly be described as young adults typically not dependent on student housing (as is the case among 18-24 year olds). Cole, Powell & Sanderson (2016, p.1) describe 25-34 year olds as "a critical cohort in terms of new household formation and tenure change" whilst also pointing out that "this is where some of the recent structural changes [...] are most evident".

We define three income groups: low, middle and high. Low-income households earn a gross household income below the social-rental threshold of 38,035 euros in 2019. Households earning more are, notwithstanding exceptions, ineligible for social rent. High-income households have a gross annual income of at least 76,070 euros – double the social-rental threshold and roughly corresponding to twice the "modal" Dutch income. For all years, we correct incomes to 2019 levels to enable comparison. We use stable categories rather than percentiles to acknowledge that the income distribution of households has become higher. In other words: we want to capture the fact that Amsterdam has become less accessible for low-income residents overall (e.g. Hochstenbach & Musterd, 2018). Using stable categories also means we measure the income of younger and older cohorts against the same measure as opposed to in relation to their respective age group. This makes the affluence of high income young adults particularly notable. Non-response for income is higher than other variables (28% in 2019), for which the provided weights correct.

We further distinguish newcomers as those who have moved within the last 2.5 years, and consider variables such as respondents' sex, household composition, education level and migration background. We follow the official Dutch classification where a person is considered to have a migration background when they themselves (first-generation) or one of their parents (second-generation) were born abroad. We further distinguish between Western and non-Western backgrounds, which rather than denoting geographical location refers to the socio-economic status of the origin country. Although this categorization has rightly been criticized, we use it here as we know that migrants from richer countries are likely overrepresented in rent liberalized housing.

Following our demand-side empirical approach and our data structure, our analyses are household rather than housing based. To give an example, we chart the share of high-income households living in the rent-liberalized sector rather than the share of rent-liberalized tenants having a high income. We subsequently chart such changing distributions across tenures over time.

Analysis and findings

Changing class composition

Over the studied period, Amsterdam's population went through some notable changes. The number of households increased by some 20% between 2007 and 2019 (Table 1), although this growth was highly uneven. The city became less accessible to both low and middle-income households, whose overall shares decreased by 8 and 3 percentage points respectively. The share of high-income households increased from 17% to 28%, reflecting rapid gentrification and an associated suburbanization of lower income groups (also Hochstenbach & Musterd, 2018). This trend was even more pronounced among young adults. In 2007, low-income households still formed a majority among young adults (53%), but by 2019 high-income households were the largest group among young adults (40%). Gentrification is thus much more pronounced among this young adult age cohort, reflecting rapid turnover and changes. These overall shifts frame our subsequent analyses, where we unravel tenure distributions within groups.

Table 1. Amsterdam household composition by tenure, age and income. Note: figures may not add up to 100% due to rounding. Absolute numbers rounded to thousands.

	2007	2013	2019	2007-2019
Regulated rent	69	58	51	-18
Liberalized rent	5	9	17	11
Owner occupied	26	33	32	7
18 to 24	4	5	5	1
25 to 34	19	20	22	3
35 to 44	23	19	18	-5
45 to 64	35	37	35	0
65 to 74	10	12	13	4
75+	9	7	7	-3
Low income	56	53	48	-8
Middle income	27	27	24	-3
High income	17	20	28	11
Low income (25-34 y/o)	53	43	34	-19
Middle income (25-34 y/o)	30	30	26	-4
High income (25-34 y/o)	17	27	40	23
Total	100	100	100	0
*N households (*1000)*	*367*	*391*	*441*	*74*
*N households 25-34 (*1000)*	*70*	*79*	*97*	*26*

Age and tenure dynamics

Overall, regulated rental housing still represents the majority tenure, housing 51% of Amsterdam households in 2019. Yet, this was 72% in 2005, indicating notable tenure restructuring (Figure 1, total population). Owner occupancy accounted for 31% households in 2019, up 10 percentage points from 2005, although growth was concentrated leading up to 2013 and has stagnated since. Liberalized rental housing accounted for a mere 4% of households in 2005, but increased to 16% in 2019, with the rate of growth increasing over time.

However, tenure trends differ substantially across age groups (Figure 1). The share of households aged 65-74 and 45-64 in home ownership has gradually increased over time, whilst the share in rent-regulated housing has declined. For these groups, liberalized rental growth has only seen a very marginal increase but at around 8% has remained stable and low. Among 35-44 year olds, we see that homeownership is the dominant tenure since 2017, mostly due to a steep drop in regulated-rental tenancies. However, while homeownership growth has also broadly stagnated among this age group, the share renting in the liberalized sector has rapidly increased, from 8% in 2013 to 19% in 2019.

Shifts are most pronounced, however, amongst young adults (25-34), for whom rent-liberalized housing went from a small minority tenure, housing 5% of young adults in 2005 and 19% in 2013, to the largest tenure in 2019, housing 38%. Conversely, regulated rent has been in structural and steep decline among young adults over the study period, falling from 60% in 2007 to 30% in 2019. Importantly, this decline is substantially more than the decline of 25-34 year olds in homeownership, which reduced from 30% in 2007 to 25% in 2019. The main takeaway is that broad housing reforms, therefore, have particularly made younger adults increasingly dependent on expensive rental housing in the rental segment. While this also comes at the expense of young adults able to buy their home – as the literature on generation rent emphasizes – it has particularly replaced young adults renting in the regulated segment.

Figure 1: Tenure distribution by age groups 2005-2019 (with 95% confidence intervals)

We can further stratify our analyses by looking at households with different incomes (Figure 2).

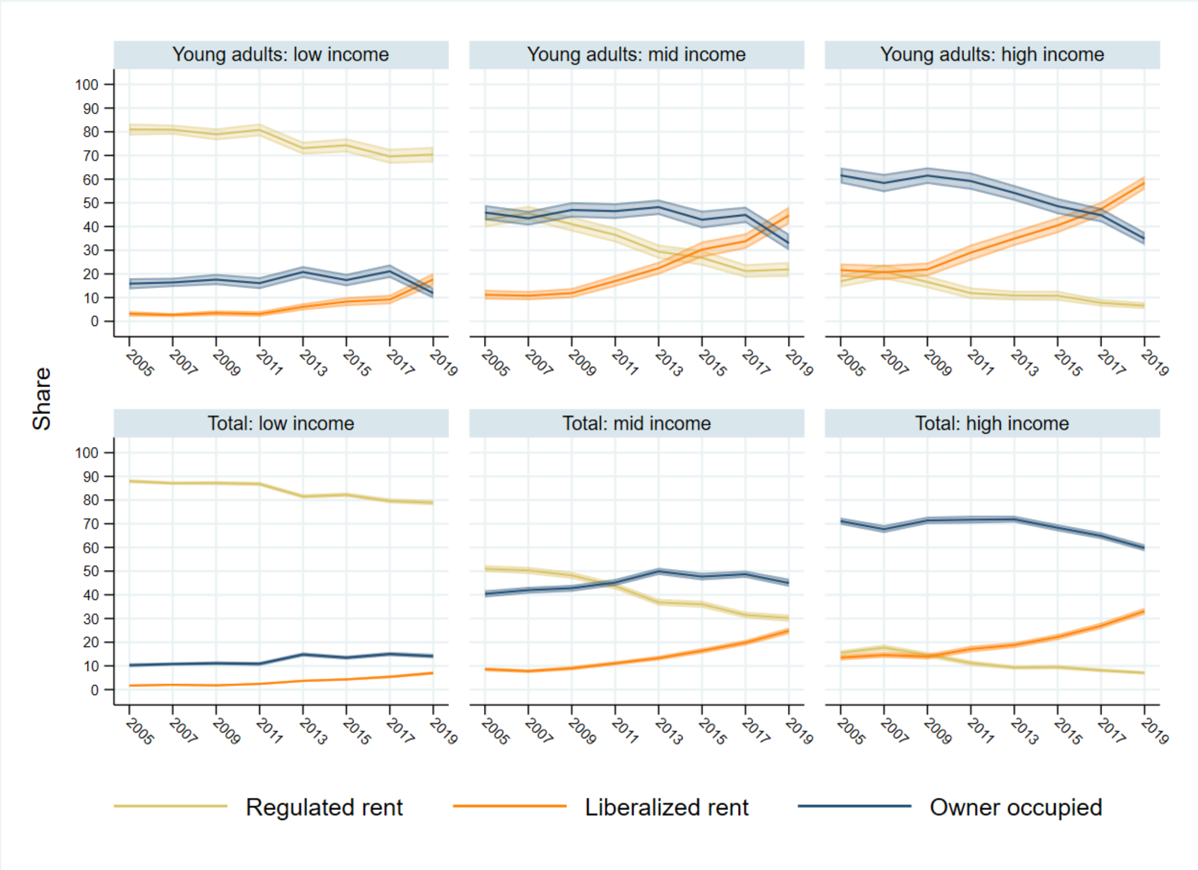
While Amsterdam has become less accessible for low-income households overall, 79% of those that do reside in the city live in regulated rental housing, down from 89% in 2005. Around 7% of how-income households live in liberalized rental housing despite the high rents, up from 2% in 2005. One in three high-income households now live in the rent-liberalized segment, and one-in-four middle-income households, while in 2005 this stood at 14% and 9% respectively.

Looking at 25-34 year olds specifically (Figure 2), almost 60% of young adults with a high income in 2019 rented in the liberalized segment, while this stood at around 20% up until the GFC. Conversely, the owner-occupancy rate dropped from over 60% to around 35%, suggesting a clear trade off. Among middle-income young adults we see a similar though less pronounced shift, with some 40% now renting in the liberalized sector, compared to some 14% pre-GFC. This went mostly at the expense of regulated renting (from 43% in 2005 to 22% in 2019) and more recently also owner occupancy (from 45 to 33%). Among low-income households, an increase toward liberalized renting can also be identified though it remains a relatively small tenure – around 18% of low-income young adults live in the liberalized rental sector. Overall, we see that the growth of the liberalized rental sector has particularly catered to higher-income young adults, at the expense of their homeownership, while doing less to accommodate low and even middle income groups.

What do these data tell us? Housing reforms – nationally and locally – have rendered middle-income and high-income young adults increasingly dependent on expensive rental housing in the liberalized segment. The institutional push to create a substantial rent-liberalized segment has thus particularly catered to middle and, particularly, high-income households. Both these groups are increasingly failing to enter owner occupancy, with stricter eligibility criteria have particularly excluded middle-income young adults. On the other hand, national government has barred them from entering social rent through the introduction of strict maximum income criteria.

The vast majority of low-income young adults continue to live in regulated rental housing, though certainly less than before. This does not mean these groups are left largely untouched by the political promotion of liberalized rental housing. Instead, as Table 1 shows, low-income young adults are increasingly excluded from Amsterdam altogether. This implies that low-income young adults are excluded from moving to Amsterdam in the first place, while those having grown up in the city are increasingly unable to leave the parental home. When they do, they are often left with little choice but to move outside of the city. This is the differentiated effect of recent national and urban housing politics: while more affluent young adults resort to renting expensively, their low-income peers are excluded altogether.

Figure 2: Tenure distribution by income groups 2005-2019 among young adults (with 95% confidence intervals) compared to tenure distribution by income groups 2005-2019 among the overall study population



Changing conditions of the rent liberalized sector

Young adults are not only increasingly faced with high rents in the liberalized segment, but also confronted with housing precarity – a novelty in the Dutch context where tenant protection has previously been strong. Temporary contracts were historically only permitted for niche groups, making renting "not very different from home-ownership in the sense of security of tenure" (Huisman & Mulder, 2020, p.2). However regulations have gradually loosened since the early 2000s, and from 2016 temporary (one or two year) contracts have become common. For students, campus contracts became standard in formal (housing association-owned) student housing since the early 2000s. These exist alongside five year youth contracts, a recent addition by housing associations who assume that after this period young adults will have earnt enough to buy or will have access to social housing. In light of rapidly increasing prices and long waiting lists for social housing, these expectations are unlikely to materialize.

Temporary contracts are thus a relatively new phenomenon in the Netherlands, and suitable quantitative data are scarce (however, see Huisman, 2016 and Huisman & Mulder, 2020). Our survey data suggest that in 2013 around 3-4% of the total Amsterdam population rented on a temporary basis (previous waves of the Living in Amsterdam survey didn't register temporary tenancies), which, by 2019, had increased to around 7%. Although this remains a rather small percentage, it also denotes a doubling. Among young adults, this share increased from 6-7% in 2013 to 16-18% in 2019. This increase was particularly notable post-2017, after the large-scale introduction of temporary tenancies. Around one in six young adults living in Amsterdam in 2019 were thus dependent on precarious rental contracts, a substantial change in an urban and national context previously known for its strong tenant protection. Investigative journalism has suggested that by 2020 temporary contracts were the dominant contract form among private landlords for new lettings across the Netherlands (Salomons & Voogt, 2020).

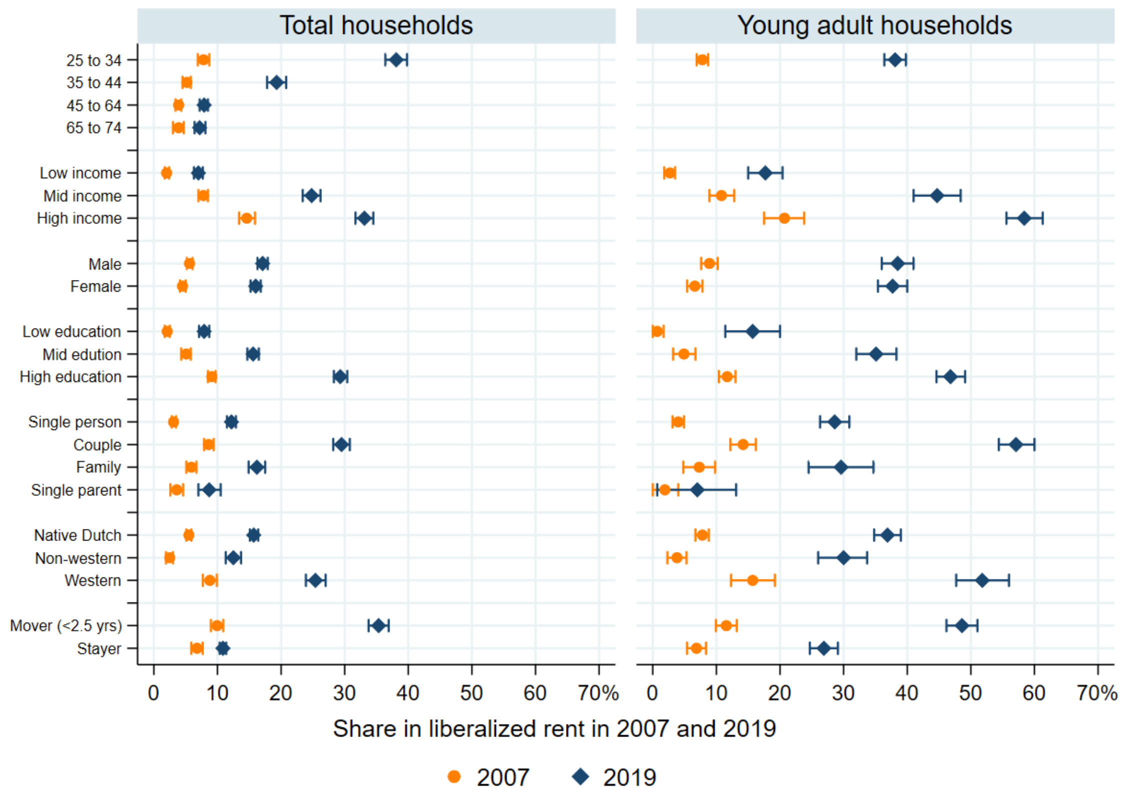
Rent-liberalized housing across demographic groups

The increase in rent-liberalized housing in Amsterdam has particularly catered to higher-income households and young adults, as we have shown. It remains an open question, however, to what extent the tenure caters to specific groups, or whether it has increased across the board. We now turn to how other household characteristics are represented in the liberalized section, again looking at all households as well as young adults specifically.

Figure 3 reveals highly uneven patterns in residents with different characteristics residing in the liberalized rental tenure between 2007 and 2019. Apart from particularly steep increases among the affluent and the young (Figures 1 and 2), strong increases can be found among highly educated residents, and those with a western migration background. Many of these are temporary knowledge workers seeking flexible accommodation, but also outsiders who lack the networks to access more affordable housing options. Interestingly, while the liberalized sector is often presented as a housing solution for (young) single-person households, our data shows that couples without children are particularly overrepresented in the tenure (30% in 2019), and even families with children reside in the tenure more often than singles. An explanation is that high rents are particularly insurmountable for those on a single income. As expected, recent movers are also overrepresented in the liberalized sector, with one in three recent movers (i.e. those that moved the past 2.5 years to, or within, Amsterdam) living in the tenure in 2019. This is a necessary consequence of recent growth, but also indicates that the tenure acts as a stepping stone for those in a transitory life phase. The large share of recent movers in the sector is further reinforced by the advance of temporary contracts, displacing tenants and enforcing churn.

The liberalized rental sector has become an important tenure across young adults with different characteristics. However, among young adults, roughly the same uneven patterns and trends apply, though more extreme. More than half of all young couples, high-income households, and those with a western migration background were living in rent-liberalized housing in 2019. Interestingly, while roughly half of all recently moved young adults live in liberalized housing, almost 30% of all "stayers"(i.e. young adults that haven't moved in the past 2.5 years) live in liberalized housing. These patterns suggest that the tenure has become more than a transitory tenure for many young adults, but a longer-term place of residence as well.

Figure 3: Share of total households and 25-34 year olds living in liberalized rent by different characteristics in 2007 and 2019 (with 95% confidence intervals).



Housing affordability stress and changes to size and costs of housing

So far, our analyses have shown that tenure restructuring has broadly increased dependency on liberalized rental housing. It has accommodated higher income growth, while excluding lower income populations. Now we turn to affordability implications for those living in the tenure (Table 2).

Between 2007 and 2019 average inflation-corrected rents in the tenure rose by 22%, from €988 to €1204 per month. At the same time, apartments in the tenure have become smaller, decreasing by an average of 14% over the period studied, from 77m² to 66m². This is because buy-to-let purchases concentrate in the smaller housing segment, and new constructions are typically relatively small (Aalbers et al., 2020). Consequently, mean rents per square meter increased by 43%, from around €14 to €20. Renters spend an increasing share of their income on rent. In 2007, rents on average ate up 29% of net household incomes, in 2019 this share had increased to 33%. Very similar trends apply when zooming in on young adults and recent movers. In sum, renters in the tenure are spending increasing amounts and shares of their income on rent while getting less in return – at least in terms of size.

Overall, housing affordability stress in the rent-liberalized tenure clearly increased, which we define as spending 40% or more of net household income on basic rent (without utilities). In 2019 23% of households in the rent liberalized sector experienced housing affordability stress compared to 19% in 2007. The share is slightly lower for young adults (20% in 2019), reflecting the increased affluence of those in this age cohort that manage to access the tenure. However, when further stratifying by income, we see vast differences between groups. A consistently high share (around 70%) of low-income households in rent liberalized housing face housing affordability stress, which hardly changed between 2007 and 2019. In this timeframe, however, we see a steep increase in housing affordability stress among middle-income households (from around 11% in 2007 to around 18% in 2019). Notable changes can also be seen in single-person households (from around 30% in 2007 to over 40% in 2019), and families with children (from around 5% in 2007 to 15% in 2019). These patterns and trends suggest rent-liberalized housing is increasingly geared towards high income and, importantly, dual earner households.

In short, as rents have increased, rent burdens and associated housing affordability stress have increased across the tenure, albeit unevenly. While the rent-liberalized tenure largely excludes lower-income populations, it requires increasingly stark trade-offs from those that do manage to access the tenure.

Table 2. Housing affordability indicators 2007-2019 among renters in the liberalized sector. Note: rents are basic rents (without utilities); rent quotes are basic rents as a percentage of net household income; households in affordability stress spend 40% or more of their income on basic rent.

				Change	
		2007	**2019**	**%**	**%-point**
Total	Size (m2)	77	66	-14	
	Rent (€)	988	1204	22	
	Rent per m2 (€)	14	20	43	
	Rent quote (%)	29	33		4
	Rent burdened (>40%)	19	23		5
Young adults	Size (m2)	66	59	-11	
	Rent (€)	1012	1235	22	
	Rent per m2 (€)	17	23	37	
	Rent quote (%)	29	32		3
	Rent burdened (>40%)	19	20		1
Recent movers	Size (m2)	72	61	-16	
	Rent (€)	1051	1337	27	
	Rent per m2 (€)	16	24	48	
	Rent quote (%)	31	34		3
	Rent burdened (>40%)	24	25		1

Discussion and conclusions

In analyzing the changing profiles of rental households in Amsterdam from 2005-2019, this study has considered the combined outcomes of tenure restructuring, population trends, and increasing rental market pressures, linking institutional changes and housing reforms with their residential outcomes. It has done this with a focus on different outcomes for different cohorts, centering on young adults and looking at a range of socio-economic and demographic characteristics. It has situated the findings in relation to comparable changes in more economically liberal housing sectors and market contexts. From these findings we draw three major conclusions.

First, all household types have become more dependent on liberalized rental housing, as a growing number of households have fallen between the gap of social rent and homeownership. However high-income households have driven the most growth, and now represent the largest group in this sector. With high demand from more affluent groups and rapidly increasing rent prices amounting many low-income and middle income households, particularly without a dual income, are unable to access the rapidly growing rent liberalized sector. While formal policy ambitions were to expand the liberalized rental sector to house middle-income groups squeezed from other tenures, our results demonstrate the tenure has particularly accommodated affluent households.

To this end, we argue that the growth of the rent liberalized sector has been an important driver of population restructuring, accelerating the share of affluent households in the city at the expense of middle and lower income households. Although some low and middle income households can still access regulated (albeit increasingly temporary) housing, more are being excluded from the city and displaced to the suburbs or other urban regions. We therefore argue that the shift towards rent-liberalized housing is not only a response to households falling between other tenures, but also represents a refocusing of Amsterdam's gentrification agenda. Attracting more affluent households and accommodating urban growth in Amsterdam was previously stimulated through homeownership (Van Gent, 2013). However, particularly since the GFC, urban upgrading through owner occupancy has run out of steam as the tenure is now beyond the reach of most young adults, even the high income or upwardly mobile amongst them. Amsterdam's gentrification model has therefore been supplemented by one driven by an expanding high price rental sector (see Van Gent & Boterman, 2019).

Second, our case demonstrates how private-rental growth need not be market driven but can also be state orchestrated. Both national and local government have played an active role in expanding and shaping liberalized rental housing in Amsterdam. The private rental sector was revived and restructured to accommodate households falling between social housing and homeownership. National policies have restricted social-rental access to the poorest households, while its pro-homeownership policies have fueled price increases (along with the cross-national trend of increasingly low interest rates). While more right-wing national governments have pushed large scale rent liberalization, the more left-wing Amsterdam governments have developed policies to steer liberalization, e.g. attempting to keep rent levels in check (Hochstenbach & Ronald, 2020). The result is a combination of policy agendas on both state levels that have resulted in the hollowing out of rent regulations and facilitation of temporary contracts. These ultimately leave younger groups at a disadvantage compared to older cohorts, who continue to benefit from decades of tenant protection and rent controls. The active role of the state in driving and mediating liberalized rental growth contrasts countries such as the UK, where the sector is largely under control of the market. In these countries, the challenges young adults face in the sector are therefore often discussed as beyond the government's control. Although Amsterdam's emergent rental landscape bears a striking resemblance to the liberalized housing contexts associated with 'generation rent', it has been shaped in a place-specific way, coming with divergent outcomes for young adults.

Third, we show that young adults' increasing dependence on private rental housing in Amsterdam is not only driven by decreasing access to homeownership but, even more so, by decreasing access to affordable social rent. The post-crisis restructuring of rental markets has been more salient in explaining the increase in young households relying on a more costly and precarious rental sector, than decline rates of homeownership amongst this cohort. A focus on the latter in 'generation rent' discourse therefore indicates an over-focus on middle class groups, as well as a persistent ideology of homeownership in policy-making, public debate and academia. Making this distinction is crucial as (largely right-wing) political parties advocate for increasing home ownership rates as an attempt to solve young adults' housing crisis. This approach does little for low and even middle income young adults, with potentially adverse effects for these groups (Hilber, 2015; Carozzi, Hilber & Yu, 2020).

We demonstrate that the rise of a 'generation rent' comes with different causes and consequences across countries. More attention should rather be directed towards the liberalization of rental sectors, how they are mediated on a national and a city level, and with what effects for young adults from different socio-economic backgrounds. Although we have found that recent policy change has stimulated divisions between existing residents and (younger) newcomers trying to make their way in an increasingly market-driven rental system, this paper also echoes the caution of other studies. To narrowly focus on generational divides while ignoring key dimensions such as class, is too simplistic (Hochstenbach & Arundel, 2021; Christophers, 2019; Coulter et al., 2020).

The findings of this study are not only relevant to the Netherlands as many other countries and cities are undergoing processes of liberalization and tenure restructuring, such as Germany, Austria and the Nordic countries. They also provide insight for the classic homelands of 'generation rent' where large liberalized rental sectors are the norm, and rent regulation is cited as a potential solution to the challenges faced. Further points for future study have arisen. Temporary and informal housing sectors also seem to be gaining traction and we need to know more about these tenures and the profiles of their occupants compared with other types of tenants. Similarly, greater understanding is needed of the increasingly fragmented pathways of young adults through different tenures. Their prolonged reliance on often expensive and temporary rental housing may have profound impacts on their mental health and overall well-being, suggesting that 'generation rent' is not solely about housing issues. Finally, this study drew on data leading up to 2019, the year before Covid-19 pandemic. Along with increasing concerns about housing affordability, the pandemic may prove a shock effect setting in motion new rounds of housing restructuring.

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References

Aalbers, Manuel B, Hochstenbach, Cody, Bosma, Jelke, & Fernandez, Rodrigo (2020). The Death and Life of Private Landlordism: How Financialized Homeownership Gave Birth to the Buy-To-Let Market, Housing, Theory and Society, 1-24

Arundel, Rowan, & Lennartz, Christian (2020). Housing market dualization: linking insider–outsider divides in employment and housing outcomes, Housing Studies, 35:8, 1390-1414.

Arundel, Rowan, & Ronald, Richard (2020). The false promise of homeownership: Homeowner societies in an era of declining access and rising inequality, Urban Studies, 1–21

August, Martine (2020). The financialization of Canadian multi-family rental housing: From trailer to tower, Journal of Urban Affairs, 1-23.

Bayrakdar, Sait, Coulter, Rory, Lersch, Philipp, & Vidal, Sergi (2019). Family formation, parental background and young adults' first entry into homeownership in Britain and Germany, Housing Studies, 34:6, 974-996

Beswick, Joe, Alexandri, Georgia, Byrne, Michael Vives-Miró, Sònia, Fields, Desiree, Hodkinson, Stuart & Janoschka, Michael (2016). Speculating on London's housing future, City, 20:2, 321-341

Boelhouwer, Peter, & Priemus, Hugo (2014). Demise of the Dutch social housing tradition: impact of budget cuts and political changes, Journal of Housing and the Built Environment, 29:2, 221-235

Boterman, Willem, & Van Gent, Wouter (2014). Housing liberalisation and gentrification: The social effects of tenure conversion in Amsterdam, Tijdschrift voor Economische en Sociale Geografie, 105:2, 140–160

Buzar, Stefan, Ogden, Philip E & Hall, Ray (2005). Households matter: the quiet demography of urban transformation, Progress in Human Geography, 29:4, 413-436.

Byrne, Michael (2020). Generation rent and the financialization of housing: a comparative exploration of the growth of the private rental sector in Ireland, the UK and Spain, Housing Studies, 35:4, 743-765

Carozzi, Felipe, Hilber, Christian A L & Yu, Xiaolun (2020). On the Economic Impacts of Mortgage Credit Expansion Policies: Evidence from Help to Buy, CEPR Discussion Paper No. DP14620, (available at SSRN: https://ssrn.com/abstract=3594250)

Christophers, Brett (2019). A tale of two inequalities: Housing-wealth inequality and tenure inequality, EPA: Economy and Space, 0:0, 1-22

Cole, Ian, Powell, Ryan, Sanderson, Elizabeth (2016). Putting the squeeze on "Generation Rent": housing benefit claimants in the private rented sector- transitions, marginality and stigmatisation, Sociological Research Online, 21:2, 1-14

Coulter, Rory, Bayrakdar, Sait, & Berrington, Ann (2020). Longitudinal life course perspectives on housing inequality in young adulthood, Geography Compass, 1-15

Fainstein, Susan (2010). The Just City, New York: Cornell University Press

Fields, Desiree (2018). Constructing a New Asset Class: Property-led Financial Accumulation after the Crisis, Economic Geography, 94:2; 1-38

Forrest, Ray & Murie, Alan (1983). Residualization and council housing: Aspects of the changing social relations of housing tenure, Journal of Social Policy 12:4, 453-468

Forrest, Ray, & Hirayama, Yosuke (2015). The financialization of the social project: Embedded liberalism, neoliberalism and home ownership, Urban Studies, 52:2, 233-244

Fuster, Andreas, Plosser, Matthew, Schnabl, Philipp, & Vickery, James (2019). The Role of Technology in Mortgage Lending, The Review of Financial Studies, 32:5, 1854-1899

Grander, Martin (2021). The inbetweeners of the housing markets – young adults facing housing inequality in Malmö, Sweden, Housing Studies, 1-18

Hilber, Christian (2015). UK Housing and Planning Policies: the evidence from economic research, CEP Election Analysis Papers 033, Centre for Economic Performance, LSE.

Hochstenbach, Cody (2021). Private landlordism, class and social inequality: Landlord elites on the Dutch housing market. Centre for Urban Studies Working Paper (50).

Hochstenbach, Cody, & Arundel, Rowan (2021). The unequal geography of declining young adult homeownership: divides across age, class and space, Institute of British Geographers

Hochstenbach, Cody, & Boterman, Willem (2018). Age, life course and generations in gentrification processes in Handbook of Gentrification Studies by Loretta Lees with Martin Phillips Chapter 11 170-185.

Hochstenbach, Cody, & Musterd, Sako (2018). Gentrification and the suburbanization of poverty: changing urban geographies through boom and bust periods, Urban Geography, 39:1, 26-53

Hochstenbach, Cody, & Ronald, Richard (2020). The unlikely revival of private renting in Amsterdam: Re-regulating a regulated housing market, Economy and Space, 52:8, 1622-1642

Hoekstra, Joris (2017). Reregulation and Residualization in Dutch social Housing: a critical Evaluation of new Policies, Critical Housing Analysis, 4:1, 31-39

Hoekstra, Joris & Boelhouwer, Peter (2014). Falling between two stools? Middle income groups in the Dutch housing market, International Journal of Housing Policy, 14:3, 301-313

Hoolachan, Jenny, McKee, Kim, Moore, Tom, & Soaita, Adriana M (2017). 'Generation rent' and the ability to 'settle down': economic and geographical variation in young people's housing transitions, Journal of Youth Studies, 20:1, 63-78

Huisman, Carla (2016). A silent shift? The precarisation of the Dutch rental housing market, Housing and the Built Environment, 31, 93-106

Huisman, Carla, & Mulder, Clara. (2020). Insecure tenure in Amsterdam: who rents with a temporary lease, and why? A baseline from 2015, Housing Studies, 1-24

Hulse, Kath, Burke, Terry, Ralston, Liss, & Stone, Wendy (2012). The Australian private rental sector: changes and challenges, AHURI Positioning Paper No.149. Melbourne: Australian Housing and Urban Research Institute.

Kadi, Justin, & Musterd, Sako (2015). Housing for the poor in a neoliberalising just city: Still affordable, but increasingly inaccessible, Tijdschrift voor Economische en Sociale Geografie,106:3, 246-262

Kemp, Peter (2015). Private Renting After the Global Financial Crisis, Housing Studies, 30:4, 601-620

Lennartz, Christian, Arundel, Rowan, & Ronald, Ronald (2016). Younger Adults and Homeownership in Europe Through the Global Financial Crisis, Population, Space and Place, 22, 823-835

Lersch, Philipp M, & Dewilde, Caroline (2015). Employment insecurity and first-time homeownership: evidence from twenty-two European countries, Environment and Planning A, 47, 607-624

Ley, David (1996). The New Middle Class and the Remaking of the Central City. Oxford University Press

Malpass, Peter (2004). Fifty Years of British Housing Policy: Leaving or Leading the Welfare State? European Journal of Housing Policy, 4:2, 209-227

McKee, Kim (2012). Young People, Homeownership and Future Welfare, Housing Studies, 27:6, 853-862

Neuteboom, Peter & Brounen, Dirk (2011). Assessing the Accessibility of the Homeownership Market, 48:11, 2231-2248

Preece, Jenny, Crawford, Joe, McKee, Kim, Flint, John, & Robinson, David (2020). Understanding changing housing aspirations: a review of the evidence, Housing Studies, 35:1, 87-106

Ronald, Richard, & Kadi, Justin (2018). The Revival of Private Landlords in Britain's Post-Homeownership Society, New Political Economy, 23:6, 786-803

Ryan-Collins, Josh, Macfarlane, Laurie, & Lloyd, Toby (2017). Rethinking the Economics of Land and Housing, Zed Books Ltd,

Salomons, Michelle, & Voogt, Felix (2020). Tijdelijke contracten zijn er voor de huisjesmelkers. De Groene Amsterdammer, 7 December 2020

Van Duijne, Robbin J, & Ronald, Richard (2018). The unraveling of Amsterdam's unitary rental system, Housing and the Built Environment, 33, 633-651

Van Gent, Wouter (2013). Neoliberalization, Housing Institutions and Variegated Gentrification: How the 'Third Wave' Broke in Amsterdam, International Journal of Urban and Regional Research, 37:2 503–22

Van Gent, Wouter, & Boterman, Willem (2019). Gentrification of the changing state, Tijdschrift voor Economische en Sociale Geografie, 110:1, 35-46

Van Gent, Wouter, & Hochstenbach, Cody (2020). The neo-liberal politics and socio-spatial implications of Dutch post-crisis social housing policies, International Journal of Housing Policy, 20:1, 156-172.

Van Kempen, Ronald & Priemus, Hugo (2002). Revolution in Social Housing in the Netherlands: Possible Effects of New Housing Policies, Urban Studies, 39:2, 237-253

Van Loon, Jannes, & Aalbers, Manuel B (2017). How real estate became 'just another asset class': the financialization of the investment strategies of Dutch institutional investors, European Planning Studies, 25:2, 221-240

Uitermark, Justus (2009). An in memoriam for the just city of Amsterdam, City, 13:2-3, 347-361

Wigger, Angela (2020). Housing as a site of accumulation in Amsterdam and the creation of surplus populations, Geoforum, 1-8

Wijburg, Gertjan, Aalbers, Manuel B, Heeg, Susanne (2018). The Financialisation of Rental Housing 2.0: Releasing Housing into the Privatised Mainstream of Capital Accumulation, Antipode 50:4, 1098–1119