

International Journal of Housing Policy



ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/reuj20

Homeownership of young adults in Austria from a national and regional perspective since 2010 – a fading dream?

Alexis Mundt, Karin Wagner, Stefan Angel & Wolfgang Amann

To cite this article: Alexis Mundt, Karin Wagner, Stefan Angel & Wolfgang Amann (22 May 2024): Homeownership of young adults in Austria from a national and regional perspective since 2010 – a fading dream?, International Journal of Housing Policy, DOI: 10.1080/19491247.2024.2339426

To link to this article: https://doi.org/10.1080/19491247.2024.2339426







Homeownership of young adults in Austria from a national and regional perspective since 2010 – a fading dream?

Alexis Mundt^a, Karin Wagner^b, Stefan Angel^c and Wolfgang Amann^a

^aInstitute for Real Estate, Construction and Housing IIBW, Vienna, Austria; ^bAustrian Central Bank, Vienna, Austria; ^cAustrian Institute of Economic Research WIFO, Vienna, Austria

ABSTRACT

Since around 2008 there has been a sharp decline in homeownership rates in many OECD countries, particularly among young adults. This may reflect changing preferences for more flexible housing options or a decline in affordability due to a combination of house price increases and more difficult access to finance (mortgage loans, deteriorating labour market conditions, insufficient income, etc.). We first examine how these trends affect Austria as a whole and then focus on two regions with long-term policy strategies to promote homeownership through tailored housing subsidy programmes (Lower Austria, Vorarlberg). We use survey data from three sources (Microcensi, EU-SILC, HFCS) and regional administrative data. Our results show that young adults (up to 35) are less likely to become homeowners in 2020 than in 2010, although this is more pronounced for the middle-aged (35-49) than for younger people. We show that the analysis at national level is insufficient, as there are large differences between regions and between types of dwelling. Focusing on the regional level reveals that price dynamics in urban areas, which exceed income developments, appear to be the main drivers. As young households participate less in homeownership than previous generations, this points to a latent and deepening problem of intergenerational equity. Current regional policies to promote homeownership do not reach the necessary scale to counteract the dominant market trends. We discuss regional policy options that make use of the Austrian housing policy framework and focus on increasing the overall supply of housing rather than exclusively on demand-side measures.

KEYWORDS: Homeownership; affordability; housing policy; Austria; young adults; regional analysis

Introduction

In the 1990s and early 2000s many countries strongly increased their homeownership rates through owner-occupied housing policies. This development ended abruptly with the global financial crisis (GFC) of 2008, when many indebted households lost their homes (Arundel & Ronald, 2021; Stephens et al., 2015). As one result, the share of households renting their homes or living for free (e.g., with parents) increased significantly (Arundel, 2017; Arundel & Ronald, 2016; Lennartz et al., 2016; OECD, 2024).

Young adults (aged 18 to 34) saw a much stronger decline in homeownership than other age groups in many countries. This trend has been attributed to several reasons such as price increases that outpace income growth, insecure temporary jobs, longer periods of education, intensified care responsibilities and starting a family much later (Arundel & Doling, 2017; Arundel & Lennartz, 2018; Filandri & Bertolini, 2016; Forrest & Yip, 2012; Gentili & Hoekstra, 2021; Lersch & Dewilde, 2015; Stebbing & Spies-Butcher, 2016). Does this development simply reflect a shift in young people's preferences, leading to lower aspirations for homeownership? Or is it due to changing borrowing constraints and other economic factors and thus addressing the question of intergenerational equity?

Declining homeownership rates amongst the young and the consequent emergence of 'generation rent' (Ronald & Kadi, 2018) led to major social and policy concerns. The transformation of housing systems raises questions on its implications in terms of inequality, affordability and effects of asset-based welfare (Byrne, 2020). Commodification and financialisation of housing seem to threaten living standards especially of the young (Hick & Stephens, 2023; Bryant et al., 2024).

The pros and cons of high ownership rates and their connection to pension systems and economic stability are still debated and far from being resolved (Arundel & Ronald, 2021; Castles, 1998; Dewilde & Raeymaeckers, 2008; Dietz & Haurin, 2003; Doling & Ronald, 2010; Elsinga & Hoekstra, 2015; Kemeny, 1981; Schwartz & Seabrooke, 2008). For the individual, participating in homeownership may allow the housing cost burden to be shifted to the age of highest labour market participation and earning potential. The advantage is seen not only in the lower cost of living in the third stage of life, but also the better predictability of housing costs (Delfani et al., 2015; Doling & Horsewood, 2010; Forrest & Yip, 2012). If homeownership reduces the risk of poverty in old age, it is most effective when it is acquired at a young age and when the focus is on self-use. Thus, if policy makers chose to support homeownership and at the same time want to consider intergenerational equity, younger generations should be able to benefit from house price increases by starting to move up the housing ladder at an early stage in life. Even more so, as the ownership rate is highly affected by the country's public policy.

With interest rates until around 2022 at low levels, capital market investments for retirement savings have lost much of their importance and

housing has become a central part of wealth accumulation. With homeownership concentrated in the hands of older generations and a visible trend towards multiple property ownership (Kadi et al., 2020; Wind et al., 2020), younger generations are increasingly reliant on parental support in the form of financial transfers, inheritance, or in-kind support to become homeowners. This suggests that housing is contributing to—rather than equalising—growing wealth inequality (Arundel, 2017; Arundel & Ronald, 2021; Bryant et al., 2024). Housing policymakers should therefore be interested in monitoring changes in tenure composition over time and across generations, and in identifying the factors that influence such trends. If the main drivers are related to affordability issues rather than to a change in preferences from owning to renting, there is a particular need to find appropriate policy responses.

Although these considerations apply to all OECD countries, there is little in-depth analysis of how they affect tenure choice in Austria. Such an analysis is important for policy makers in Austria, but it is also a worthwhile study for an international academic audience, as housing in Austria is markedly different from many other European countries. First, Austria has a very low and stable homeownership rate. Second, homeownership has not received the level of political support as it has in many other OECD countries, especially in the run-up to the 2008 GFC. Tax deductibility of mortgage interest, so central to housing policy in many countries, has never been of great importance (Lunde & Whitehead, 2021). Third, Austria has a long tradition of subsidising housing with bricks and mortar subsidies evenly distributed across different tenures. Fourth, while social housing is in decline in most countries, continued support in Austria has led to an overall increase in the share of social housing, in recent decades (Mundt, 2018). Limited-Profit Housing Associations (LPHAs) play a fundamental part in this development. Regarding the position of young adults in the face of these Austrian specificities, a cross-country analysis by Lennartz et al. (2016) suggests that, as in other continental European countries, renting has become more dominant for young adults in Austria after the GFC, while other countries have witnessed a strong increase in co-residence, especially with parents (e.g., in Southern Europe). However, there are only few in-depth analyses of how these trends have affected different market segments in the owner-occupied and rented markets and what forces are driving these changes in Austria.

In this paper we examine whether and to what extent international trends of declining homeownership among young adults since 2008 can also be observed in Austria. We take a broader view than usually, and also take into account the age group 35-49 ('middle-aged') to enable comparisons with the 'young' (below 35). We discuss possible drivers and explanations for the asserted trends and how they are addressed by housing policy in two exemplary regions. As we extend the analysis to the sub-national level, we are able to consider the strong heterogeneity of housing policies, housing markets (e.g., prices) and ownership rates across the nine regions (*Länder*). As in many areas of housing research (e.g., Matznetter & Mundt, 2012), we believe that the regional level is an adequate level of investigation to challenge national results and shed light on the role of regional housing policies, which are of central importance especially in Austria. As case studies, we take two *Länder* (Lower Austria, Vorarlberg) with above-average ownership rates (and thus better comparable to other European countries or regions) and a pronounced long-term housing policy to promote homeownership. We exclude the capital city of Vienna, which has recently attracted several specific studies due to the immense importance of and support for rental housing, but which does not have a policy focus on ownership (Friesenecker & Kazepov, 2021; Kadi, 2015; Kadi & Lilius, 2022).

We address the following research questions: To what extent are international trends of a sharp decline in homeownership among young adults (aged under 35) reflected in Austria? What tenure alternatives are young adults turning to instead of homeownership? What are the differences between the under-35s and the 35–49s? What is the situation in two exemplary *Länder* that have a strong focus on homeownership? Based on this investigation, we ask: What might be the possible drivers of these developments? Do they depend on shifts in preferences rather than constraints? What is the situation in the two exemplary *Länder* and what can these cases tell us about possible explanatory factors? In order to deepen the policy debate, we then ask how regional administrations are responding to these developments and what policies they have in place to increase homeownership. We then turn to a discussion of possible policy responses in the light of the identified drivers and the Austrian housing policy framework.

The paper is structured as follows. We start with a brief review of the literature on reasons for the decline in homeownership among young adults and the policies that have been implemented to address this issue. After a section on data and methods, the following two sections examine how the tenure distribution has changed at the national level since 2010, especially for younger age groups, and how the two exemplary regions show a much more pronounced development than the national averages. We then discuss possible drivers of the identified trends in Austria, building on the international literature and using multiple data sources. We systematically discuss important drivers: changes in preferences, house prices, financing conditions and the labour market position of young adults. Building on these findings, we look more closely at another possible influence, namely the housing policies of the two exemplary *Länder*. We scrutinise their housing policies and suggest possible adjustments to their instruments in the light of our results.

Explanations for decreasing homeownership among the young and policy options

The debate about the decline in homeownership among young adults offers two points of view between changes in choice and constraints. One



line of thought points to changing preferences among young adults for more flexible tenure arrangements and a declining prioritisation of homeownership (see overview in Fuster et al., 2019). Assets and durable goods, while still highly valued, should also allow for guick mobilisation. According to this explanation, long planning horizons are no longer in vogue. Younger households may find renting more attractive because it is more flexible and predominates in urban areas, where they increasingly prefer to live. Many may be anticipating future residential mobility for career reasons (Lux & Sunega, 2012; OECD, 2021, p. 110).

Another dominant explanation is that the affordability of homeownership has deteriorated. From this perspective, young households are much less likely to own because they can no longer afford it. This trend has been attributed to several causes, but price dynamics are a fundamental component. In most OECD countries, market prices for land and housing, which have risen particularly sharply in metropolitan areas, are outpacing income growth (OECD, 2022). This narrative relies heavily on the deterioration in young adults' access to mortgage finance, which is partly explained by their weaker labour market position and longer periods of education since the 2008 GFC (Arundel & Doling, 2017; Arundel & Lennartz, 2018, Dewilde, 2020; Filandri & Bertolini, 2016; Gentili & Hoekstra, 2021; Lersch & Dewilde, 2015; Whitehead & Williams, 2017). A recent cross-country analysis of 15 Western European countries addresses this triad of influencing factors, i.e., price developments, access to finance and adverse labour market conditions of the young (Lennartz et al., 2016). It found that the countries that had most rigorously pursued the ideal of homeownership before 2008 through high levels of mortgage debt have experienced a greater decline in homeownership since then.

An important aspect of the affordability explanation is a possible change in publicly funded support for homeownership, for the population in general and for young adults in particular. Cross-country analysis shows that, for decades and in most countries, support for homeownership has been much greater than support for alternative tenures, such as social housing (Arundel & Ronald, 2021; BBSR, 2022; OECD, 2022). This has changed somewhat since the GFC but remains highly skewed. Salvi del Pero et al. (2016) analyse policies to promote access to good quality, affordable housing in OECD countries. They build on a survey in 29 reporting countries as of 2013. They show that homeowners in many OECD countries receive substantial public support, up to 2.3% of GDP. Several policy instruments are used, including both demand-side and supply-side subsidies. Demand-side subsidies include grants, financial assistance, rent-to-buy schemes and relief for distressed mortgages. The most common form, however, is tax relief for homeownership - particularly mortgage tax relief - and favourable taxation of residential property. The authors criticise these measures because they are typically not targeted at low-income earners and tend to favour better-off households. They also distort incentives to invest in other tenures and/or assets and often put additional pressure on house prices (idem, p. 52). It is now well established in the literature and policy debate that broad demand-side policies linked to the tax system have

contributed to price rallies and boom-bust cycles in the housing market (see overview in OECD, 2022). This critical stance has contributed to the reduction of tax benefits for homeowners in many countries since the 2008 GFC (Lunde & Whitehead, 2021).

But have young households been particularly affected by these changes? Taking the Australian context as a starting point, a recent review by Pawson et al. (2022) documents how countries support first-time homebuyers and encourage participation in homeownership more generally. Pawson et al. (2022) include seven countries from Europe, Asia and the Americas and look at their demand-side and supply-side instruments. Demand-side measures are the most common form of support for young homeowners in most countries. Unlike Australia, some countries have additional supply-side measures, such as the production of low-cost housing through government-sponsored land development or public and social housing with rent-to-buy schemes. Some countries, according to the authors, use more coherent housing strategies, combining supply and demand instruments and achieve better results. The authors are very critical of any demandside measures that may contribute to house price dynamics and thus price more young households out of the market than the limited number of households that may benefit from the measure.

Although Austria was not included in the Pawson et al. 2022 comparison, it possesses all the necessary features for a balanced system of supply- and demand-side housing policies. Austria provides a strong and growing social tenure alternative (Mundt, 2018), and has never heavily relied on tax breaks to increase homeownership (Lunde & Whitehead, 2021). In fact, the country has even phased out the very limited tax deductibility of mortgage interest between 2016 and 2020 (IIBW, 2021). However, to analyse the structure and changes of housing policy for young homeowners in Austria, it is necessary to examine the regional level. Since the late 1990s, the national government has had little influence. Instead, the nine regions have determined the focus of their housing policies, primarily through annual housing subsidy programmes that can impact new construction and access to existing housing. It is these regional housing subsidy programmes and their interrelationship with spatial planning and land banking that are the focus of our regional policy analysis.

Data and methods

To adequately address our research questions, it is necessary to combine several data sources to cover relevant aspects of young people's tenure choices. First, we draw on survey data from three sources. Each of them is appropriate for particular aspects of the analysis:

1. The microcensi, conducted by Statistics Austria, are the largest surveys available in Austria. Participation is compulsory by law.



Every guarter, around 20,000 households are surveyed for a maximum duration of 5 subsequent guarters. This survey provides the most reliable information on employment and tenure of the Austrian population (Statistik Austria, 2021). Although this is the largest survey in Austria, sample sizes for tenure shares in different age groups and differentiated by regions can be small, resulting in high standard errors. We discuss these limitations in the sections on changes in the tenure composition and provide the 95% confidence intervals in the respective figures. Additional information on standard errors can be found in the annexe (Table S1).

- Statistics Austria also conducts the EU-SILC. With roughly 6,000 households interviewed each year, it is a much smaller survey than the microcensus, but covers additional aspects of employment status, housing costs and income that are missing in other sources, e.g., EU-SILC is the only available micro-data source for total household income in Austria. Consequently, we make use of this data to analyse tenure changes by income groups. We analyse the labour market status of young adults, building on a set of indicators by age groups (e.g., mean equivalised incomes, mean equivalised rents, unemployment rate and percentage of fixed-term work contracts) that can be calculated with EU-SILC data (see Arundel & Lennartz, 2018; Lersch & Dewilde, 2015).
- 3. The Austrian Central Bank conducts the Eurosystem Household Finance and Consumption Survey (HFCS), the only survey that tracks information on households' asset portfolio allocation and their consumption decisions (OeNB, 2022). We use all four available waves (2010, 2014, 2017, 2021) for detailed information on households' mortgage loans and general financial conditions (Albacete et al., 2021; Fessler et al., 2021). We calculate a number of indicators per age group (e.g., share of households that did not apply for credit or that were refused when they applied for credit; debt-service-to-income levels, loan-to-income levels) to examine a changing position of young adults in access to finance (see Whitehead & Williams, 2017).

Second, we use administrative data provided by the regions' housing subsidy departments. These data contain information on housing subsidy programmes and the age distribution of beneficiaries. Other important benchmarks are used from reports for regional governments (Amann et al., 2019; Amann & Mundt, 2022). Third, we use regional house price data from the Austrian Central Bank, DSS GmbH and Statistics Austria.

Results

Tenure split since 2010

Of the 4.9 million housing units in Austria, 3.99 are primary residences, while the rest are mainly secondary homes. Of the main residences, 49% are owner-occupied (microcensus 2020, cf. Statistik Austria, 2021), one of the lowest shares of owner-occupied housing in Europe (OECD, 2021). Furthermore, the ownership rate in Austria has remained relatively stable for more than 30 years (Kunnert, 2016).

However, there are large differences between the nine Austrian *Länder*. The capital Vienna is a rental city with a strong tradition of municipal and limited-profit rental housing. In 2020, only 20% of main residences were owner-occupied. With 22% of the Austrian population, Vienna's focus on rental housing significantly lowers the national ownership rate. If Vienna were excluded, the average ownership rate of the other eight *Länder* would rise to 58%, which is much more in line with other countries and regions in Europe.

Between 2010 and 2020, our data confirm only a slight shift from owning to renting. The share of owners fell from 50% to 49%, tenants increased from 40% to 42% However, while the *house*¹ ownership rate in Austria fell significantly to 37% by 2020², the proportion of *apartment* ownership increased marginally from slightly below to slightly above 11% (see Figure 1). The overall decline in the ownership rate was therefore exclusively due to single-family houses and not to apartment ownership.

The increase in the share of rented dwellings between 2010 and 2020 is uneven across sub-sectors. The strongest growth since 2010 has been in the private rented sector (from 16% to 18%). LPHA³ renting has also increased, but to a lesser extent, and municipal housing has fallen to below 7%, mainly because no new municipal housing was built. Overall, these trends show that for many households owing has become less dominant and renting has become a more important alternative.

What about ownership among young households?

Our analysis of the microcensi from 2010 to 2020 reveals insights into ownership by age. First, the ownership rate by age in Austria resembles the general pattern in other European countries: the rate increases with age up to retirement age and decreases among pensioners. This pattern is similar in 2010, 2015, and 2020. The proportion is lowest in the age group up to 35 years. In 2020, 50% of households aged 35–49 own their home, which is already slightly above the average across all age groups. Middle-aged households (35–49) tend to switch from the rental to the owner-occupied sector. The rate is highest in the 50 to 64 age group at around 61%. Among the over-65s, the share falls again to 55%. This is mainly due to the high proportion of 'other' dwellings (20%), which includes rent-free housing.⁴

Second, the variation in the ownership rate across age groups can be explained entirely by the proportion of single-family houses. Apartment ownership, on the other hand, has a constant share of 10–12% across all age groups.

Thirdly, since 2010 there has been a strong shift to private renting by households aged under 35. Their share of privately rented dwellings rose from 31% to 38%. Surprisingly, the rise in private renting was not reflected in a disproportionate fall in homeownership. The ownership rate for young adults aged up to 35 fell from 26% to 24%, very much in line with the rate for all households. In contrast, other (non-private) rental tenures declined sharply, with municipal renting falling from 10 to 7% and LPHA renting falling slightly to 23%. Young adults clearly did not have the same opportunity (or inclination) to enter the social rented sector as other age groups during our observation period. Moreover, unlike in other countries, particularly in Southern Europe since 2010 (Lennartz et al., 2016), young adults have not been able to benefit from housing that has been left to them free of charge, especially by family members, which is also reflected in our data by the drop in the percentage of other tenures from 10% to 8% (Figure 1).

Fourthly, the decline in ownership is more pronounced for the 35–49 age group than for younger households. The ownership rate fell from 55 to 50%, again only for single-family houses. Apartment ownership, on the other hand, remained constant. This age group recurred to all rental market segments. The largest increase (from 17% to 21%) was in the private rented sector (Figure 1).

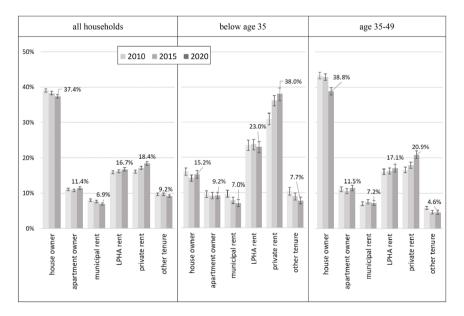


Figure 1. Tenure split in Austria since 2010, overall and age groups. Source: Microcensi 2010, 2015, 2020; own calculation and depiction; shares also depict the 95% confidence interval.

Overall, private renting has become more important for households; more so for the young, but also for those aged up to 49. The decline in homeownership has been more pronounced for the 36–49 age group, where the fall is well above the overall average. Surprisingly, young households up to the age of 35 have not experienced an above-average decline in the ownership rate. On the contrary, they are much less likely to be living in social rented and free housing in 2020 than in 2010.

In summary, our analysis of ownership rates across age groups confirms previous findings that over time young households tend to acquire property later in life, if at all (Beer & Wagner, 2017; Kunnert, 2016). However, there are marked differences, firstly between the young and the age group 35–49 and, secondly, between house and apartment ownership. Our regional case studies below will show how these national findings mask important regional differences and how these differences can shed light on the factors driving such patterns of tenure change.

Regional case studies: a closer look at tenure changes

Case study 1: Lower Austria

Lower Austria is Austria's largest region. It is home to 19% of the population, making it the most populous region after Vienna, which it surrounds. Multi-storey buildings dominate in the vicinity of Vienna, while single-family houses are more common further away. For decades, lower Austria's housing policy has generously promoted the construction of single-family houses, mostly in the form of low-interest long-term loans for self-building, which is as dominant in Austria as in some neighbouring countries, e.g the Czech Republic, Switzerland, and Germany. In the case of apartments in multi-storey buildings, however, rental apartments (partly with a delayed right-to-buy explained below) from LPHAs dominate. The purchase of apartments in buildings constructed by commercial property developers is also subsidised, but less generously than, for example in Vorarlberg (see below).

In line with the national trend, Lower Austria has experienced a decline in homeownership rates and an increase in renting. An analysis by age group and sub-sectors reveals further differences. Among young adults under 35, we see a declining trend in apartment ownership, while house ownership remains unaffected. Private renting has increased, but LPHA renting is still the most common and more affordable option (IIBW, 2023). For the 35–49 age group, the decline in homeownership is most pronounced, but again this is accompanied by an increase in LPHA and private renting (Figure 2).

The most striking finding is that young adults have lost ground in apartment ownership, even though there is a general trend from houses to apartments due to their more urban location. Although the trend of suburbanisation around Vienna (where apartments predominate) also

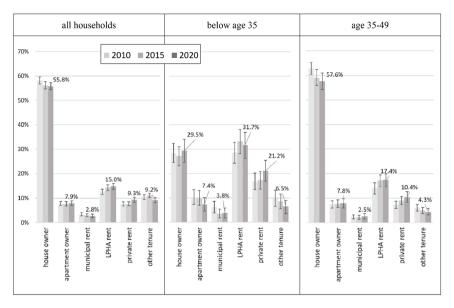


Figure 2. Tenure split in Lower Austria since 2010, overall and age groups. Source: Microcensi 2010, 2015, 2020; own calculation and depiction; shares also depict the 95% confidence interval.

affects young adults, data suggest these households will rent rather than own if such relocations take place. Affordability issues, rather than a change in preferences, seem to be at the heart of this. The data also show that young households' dependence on LPHA housing has not increased in the past five years, in contrast to the private rented sector.

Case study 2: Vorarlberg

Vorarlberg is the smallest *Land* and houses about 4% of Austria's population. In face of severe restrictions on building land due to its mountainous topography, multi-storey buildings dominate in the densely populated valleys, which can be classified as 'urban' regions. The cities along the Rhine valley have grown enormously in recent decades. Figure 3 shows that, in Vorarlberg, the ownership rate has fallen more strongly in the last ten years compared to Austria as a whole.

While across Austria the ownership rate of young households up to the age of 35 fell from 26% to 24% over a ten-year period, the decline was much stronger in Vorarlberg (from 38% to under 30%). The decline in the first half of the decade was much stronger than in the second and affected owner-occupied homes (from 20% to 14%), but also owner-occupied apartments (from 19% to 15%). Conversely, the importance of private rental apartments significantly increased from 37% to 48% in just 10 years (Figure 3). Rental apartments became more common among young households (2010: 8%, 2020:

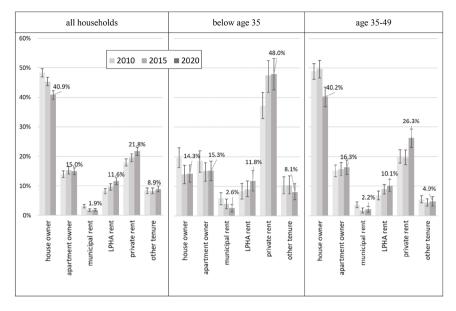


Figure 3. Tenure split in Vorarlberg since 2010, overall and age groups. Source: Microcensi 2010, 2015, 2020; own calculation and depiction; shares also depict the 95% confidence interval.

12%), while stagnating at around 23% across Austria. In contrast, the importance of municipal housing decreased slightly in the same period. The growing non-profit housing sector in Vorarlberg was able to partially compensate for the decline in ownership and offers many households a safe, inexpensive, and long-term alternative. The increase in the private rental segment, on the other hand, should be viewed cautiously, Firstly, rents are significantly more expensive and secondly, due to the increasing limited-time rental contracts tenancies are often uncertain (Statistik Austria, 2023c). We return to this policy issue below.

For households in Vorarlberg aged 35–49, we observe a strong and significant decline in house ownership (from 49% in 2010 to 40% in 2020), which exceeds the national trend (from 43% in 2010 to 39% in 2020) whereas apartment ownership remained constant. Significant increases can also be observed for the share of privately rented dwellings (from 20% to 26%) and—to a lesser extent—for the LPHA rental sector (from 7% to 10%).

Possible explanations – choice or constraint?

In the following section we discuss the extent to which the available evidence supports the dominant explanations for the decline in homeownership among young adults, including preferences and affordability, which encompasses price developments, financial conditions and the labour and income situation of young adults.



Changes in preferences and social trends

There are no comprehensive data on changes in tenure preferences in Austria. However, certain trends point to a general shift from owning to renting, especially among younger households. Firstly, Austria is experiencing considerable urbanisation, with the largest cities growing much faster than rural areas (ÖROK, 2022). This may explain the shift from single-family houses to dwellings in multi-family buildings observed in the rental and owner-occupied sectors. Second, international migration is the strongest driver of population change in Austria. As many newly arrived households have lower incomes than the resident population (Statistik Austria, 2023a), a shift from the owner-occupied to the rented sector is likely. Thirdly, as in many countries, household formation occurs later in the life cycle (Statistik Austria, 2023b). Marriage, having children and homeownership often go hand in hand and are only partly dependent on job security and stable incomes. As the average age of having a first child continues to rise (Statistik Austria, 2023b), the decision to become a homeowner also takes place at a later age. As a fourth long-term trend that may influence young adults' housing choices, we see the consistency and resilience of social housing provided by LPHAs (GBV, 2023). The legal framework for their operations has been stable and subsidies from regional governments, although declining in real terms, have reached a level that the sector is growing overall. While life satisfaction among owner-occupiers is significantly higher than in the private rental sector (Angel & Gregory, 2021), the LPHA sector provides a highly valued alternative to homeownership with long-term contracts and cost-based rents that are largely decommodified from market forces (Deutsch, 2009; Matznetter, 2002).

These four trends cannot be interpreted without their connection to affordability issues, i.e., a stronger demand for rental housing in light of decreased affordability of owner-occupied housing. A regular survey commissioned by major Austrian banks (IMAS International, 2021) shows that households' desire to have more living space at their disposal increased with the onset of the COVID pandemic, especially for young families. At the same time, there has been a sharp decline in the percentage of households that can imagine buying instead of renting in the coming years. The percentage fell from 49% in 2018 to 39% in 2021. Follow-up questions in the survey show that the decline is not due to a change in preferences, but to the fact that many households report being financially unable to acquire homeownership. In 2021, 49% of all renters consider homeownership to be unaffordable due to price dynamics.

Indication of affordability issues

Housing affordability as a measure encompasses the relationship between people and housing and consists of both issues of income/wealth and household access to finance in relation to housing prices and costs. Following Stebbing and Spies-Butcher (2016, p. 200), who examine the emerging generational differences in homeownership in Australia, our analysis of homeownership rates by age groups and income levels for Austria provides strong evidence that the decline in homeownership is due to affordability issues rather than a change in preferences. Using EU-SILC data (which allows for income to be considered), Table 1 shows that across all age groups, homeownership declined for those in the bottom 25 per cent of incomes, while at the same time it increased for those in the top 25 per cent. The results are particularly striking for the age group 35-49, where a decline of -8.1 percentage points between 2004/2008 and 2019/21 for the bottom 25% was mirrored by an increase of 8.9 percentage points for the top 25%.

For the top incomes it seems that renting has not gained attractiveness, but quite to the contrary, owner occupation has become more of a focus for the ones who can afford it. In what follows, we will therefore take a closer look at the possible explanations for decreasing affordability of homeownership, starting with price developments, and continuing with financing conditions and the labour market position of young adults.

Housing prices

Top 25

Top 25

Bottom 25

all

72.2

39.6

65.7

Housing prices in Austria have risen much faster than the consumer price index since 2010 (Figure 4). The dynamics were strongest in Vienna, other segments of the housing market only started to outpace overall inflation around 2010. If we exclude Vienna, the increase in prices in Austria for apartments (index 218 in 2020) was much higher than for single-family houses (186 in 2020).

Average prices at the regional and municipal level show that Austria's largest cities (Vienna, Graz, Salzburg, Innsbruck, Linz) have been most affected by the price boom, followed by densely populated regions such as Vorarlberg and the semi-urban areas around the main cities (e.g., parts

	Income level (%)		Percentage	of owners	Change in		
Age group		2004-08	2008–13	2014– 2018	2019– 2021	owner share between 2004–08 and 2019–21	<i>p</i> -value (bold for significant difference)
18–34	Bottom 25	19.7	14.5	15.1	13.8	-5.9	0.006
	Top 25	38.1	41.4	43.5	43.0	4.9	0.199
35-49	Bottom 25	39.8	37.9	33.2	31.7	-8.1	0.006
	Top 25	62.1	69.4	67.4	71.0	8.9	0.000
50-64	Bottom 25	41.8	39.8	39.7	38.4	-3.3	0.153

Table 1. Percentage of owners per age group and income strata over the years.

Source: EU-SILC pooled for year groups. Notes: only people who do NOT live together with their parents. Significance test (p-value) for the change in the share between (2004–08 and 2019–21), due to small samples, years had to be pooled and only national level analysis is possible.

76.3

32.3

71.2

75.7

36.2

71.7

76.2

33.0

71.7

4.0

-6.6

6.0

0.013

0.000

0.000

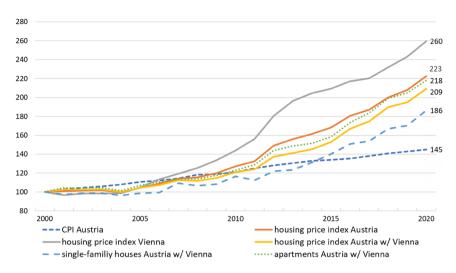


Figure 4. Housing price development in comparison to consumer prices Austria, 2000–2020.

Source: OeNB, DSS GmbH and TU Vienna for housing indices, Statistics Austria for CPI 2000.

of Lower Austria). Nonetheless, the dynamics are very uneven across Austria, with some municipalities experiencing falling prices and large inactive market segments with hardly any transactions.

A closer look at the case study regions show how Vorarlberg was particularly affected by price changes. Price levels for apartments and single-family houses are much higher than in other regions, as are price dynamics since 2015 (Figure 5). In addition, building land prices in Vorarlberg have shown the strongest dynamics of all the *Länder*. Between 2015 and 2021, prices in Vorarlberg more than doubled (208%), while in the other *Länder* they 'only' increased between 8% and 51% (Statistics Austria, regional price statistics). In Lower Austria, housing price levels and price dynamics are very heterogeneous: the closer to Vienna, the higher the level and the stronger the dynamics in the last decade.

Access to finance

Table 2 shows that mortgage financing conditions remained stable over all four HFCS waves from 2010 to 2021, mainly due to the low interest-rate environment. Access to bank mortgages has become much easier between 2010 and 2020, our observation period, for everyone, including young adults. The share of households with refused or only reduced credit (among those who have applied in last three years, including mortgage and consumer loans) has decreased across all age categories, and so did the share of households that did not apply for credit due to perceived credit constraints. Although median DSTI (debt-service-to-income) levels are well

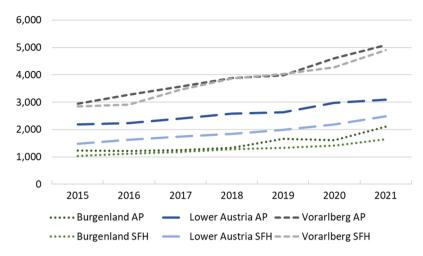


Figure 5. House and apartment price developments in selected Austrian regions 2015-20 (EUR/m²).

Source: Statistics Austria, house price statistics 2015-2021. Notes: AP: Apartment prices, SFH Single-family housing prices, data only available as of 2015.

Table 2. Financing condition indicators, HFCS 2010, 2014, 2017, 2021.

		HFCS 2	2010	10 HFCS 2014		HFCS 2017		HFCS 2021	
Indicator	Age group	% share	s.e	% share	s.e	% share	s.e	% share	s.e
Refused or only reduced credit ⁽¹⁾ (among those applying in last 3 years)									
	all	20.8	(2.9)	18.7	(3.8)	14.1	(2.4)	14.5	(4.1)
	below 35	27.5	(7.2)	17.4	(6.3)	15.8	(5.0)	18.5	(10.1)
	35 to 49	13.0	(3.0)	19.7	(5.4)	10.6	(3.5)	11.6	(4.3)
	above 50	24.2	(6.1)	18.4	(7.0)	17.3	(5.3)	15.6	(7.5)
Not applying for credit ⁽¹⁾ due to perceived credit constraint									
	all	3.1	(0.4)	2.9	(0.3)	1.9	(0.3)	2.5	(0.4)
	below 35	4.3	(0.5)	3.8	(8.0)	3.8	(0.9)	4.9	(1.4)
	35 to 49	4.7	(0.3)	5.1	(8.0)	2.3	(0.6)	2.9	(0.8)
	above 50	1.7	(0.2)	1.6	(0.3)	1.2	(0.3)	1.9	(0.4)
Debt-service-to-i	ncome (DSTI)	of indeb	oted h	ousehol	ds				
median, ratio in %		5.6	(0.9)	5.8	(0.5)	7.6	(0.4)	9.8	(0.4)
	Germany	10.9	(0.5)	8.9	(0.4)	9.7	(0.3)	8.9	(0.6)
	Euro area	14.0	(0.3)	13.4	(0.2)	13.1	(0.2)	12.8	(0.2)
Debt-to-income (DTI) of indeb	ted hous	seholo	ls					
median, ratio in %	Austria	35.6	(7.5)	32.7	(2.9)	34.0	(2.9)	31.0	(4.6)
	Germany	37.3	(3.7)	38.1	(3.3)	45.1	(3.8)	34.5	(4.2)
	Euro area	65.6	(2.1)	72.8	(2.3)	71.1	(2.1)	72.8	(2.4)
Loan-to-value (L1	TV)								
median, ratio in %	Austria	18.7	(7.4)	24.8	(3.0)	24.0	(1.9)	19.2	(1.7)
	Germany	41.9	(2.2)	42.6	(1.7)	35.7	(2.1)	28.0	(1.6)
	Euro area	40.0	(0.7)	45.5	(0.9)	44.7	(0.7)	40.0	(0.7)
Owner characteri	istics gift/inho	eritance	receiv	ed					
	gift/	54.5	(2.4)	56.2	(2.0)	58.1	(1.7)	64.1	(1.5)
	inheritance received								
	without gift/ inheritance	45.7	(0.5)	44.3	(1.4)	40.9	(0.9)	36.5	(1.0)

Source: HFCS 2010, 2014, 2017, 2021. Notes: (1) consumer and mortgage loans; s.e.: standard error.

below the European average, DSTIs for new mortgage loans are rising. Despite low interest rates, 16% of new loans were for loans with a DSTI of more than 40%. Half of new loans were granted with a down payment of less than 20% (FSR, 2022). Almost half of all new loans were granted to borrowers aged 35 or younger. Most new loans were granted in rural areas of Austria (78%; FSR, 2021). Market conditions are broadly characterised by strong competition between mortgage banks.

Mortgage lending regulations were tightened in August 2022 due to growing concerns about the sustainability of lending standards in the event of unforeseen adverse developments such as a drop in income, an increase in the cost of living, unemployment, or an increase in interest rates. The new regulation by the Financial Market Supervision in Austria limits the loan-to-value ratio to 90% for mortgages of EUR 50,000 and above. The DSTI ratio cannot exceed 40% and the maximum loan term is 35 years. Lenders will have some leeway through exemptions and the restrictions are unlikely to affect most mortgages with LTVs and DSTIs of 90% and 40% respectively. In addition, the ECB has raised key interest rates from July 2022. Therefore, with higher interest rates, tighter credit and strongly rising house prices, we expect young households to find it more difficult to finance a home in the coming years.

At the same time, bank financing conditions are only one piece of the puzzle: parental support (gifts and inheritances) plays an extremely large role in real estate acquisition in Austria (Wagner, 2014). From an international perspective, this role has increased since 2008 especially in those countries and cities where low LTVs and high down payments are applied to property purchases and where house prices have risen sharply (e.g., for GB: Clapham et al., 2014; for Germany: Lennartz & Helbrecht, 2018; for Italy: Gentili & Hoekstra, 2021). In Austria, the share of heirs among owners increased continuously from 55 to 64% between 2010 and 2021 (Table 2), whereas ownership without gift/inheritance decreased at the same time. There has also been a shift in the form of parental support from inheritances to gifts, a trend that might continue as the parent generations live longer. If parental capital contributions become less frequent, it may become more difficult to secure financing.

Labour market conditions and incomes

Real income and its relation to rent payments are important indicators of how much young people can potentially save for the future purchase of a home. Incomes increased at almost the same rate for all age groups between 2009 and 2019, quite in line with overall inflation (Table 3). However, a comparison of rent and income indices in Table 3 also shows that rent payments have increased more than median total household income (equivalised for household size and composition). This development was similar for all age groups but those aged 35-49 experienced the strongest rent increases. We also observe that the median of rent payments as a percentage of income (IRR) rises with income. Whereas across all age groups the IRR amounts to 15% (2017-2019), it is 3.4 times higher (31%/9%) for the lowest income quartile compared to the richest income quartile in the period 2017-2019. When we further differentiate by age group, the IRR in the same period is 3.5 times higher for the poorest 25% among the very young (45%/13%) but only 2.7 times higher for poorest 25% in the age group 35-49 (27%/10%). Comparing 2009-2011 with 2017–2019 there is hardly any change of these relationships.

Employment conditions could also have a significant impact on earning potential and income security and thus on the decision to take out a mortgage to finance homeownership. However, our results (Table 3) show that the unemployment rate for the 25-34 age group is only slightly higher than for the total working population. Moreover, while the share of employees with a fixed-term contract is 6 to 7 percentage points higher

Table 3. Income, rent and employment status by age.

	Age ^d	2009	2019
Mean equivalised monthly rent ^a , in EUR	< 35	217	332
	35-49	184	296
	all	193	282
Mean equivalised income ^a , in EUR	< 35	19,029	23,037
	35-49	20,597	24,789
	all	20,540	24,456
Inflation index (2009 = 100) ^b		100	120
Mean equivalised rent index (2009 = 100)	< 35	100	153
	35-49	100	161
	all	100	146
Mean equivalised income index (2009 = 100)	< 35	100	121
	35-49	100	120
	all	100	119
Unemployment rate ^{c,} in %	25-34	7.6	7.5
	15-64	7.2	7.4
		Mean 2009-2011	Mean 2017-2019
Fixed-term work contracta, in %	< 35	12	13
	35-49	6	6
	all	7	7
		Median 2009-2011	Median 2017-2019
Income-to-rent ratio (IRR) overall, in %	< 35	19	21
	35-49	13	16
	all	13	15
Income-to-rent ratio (IRR) for income bottome 25%, in %	< 35	46	45
	35-49	26	27
	all	28	31
Income-to-rent ratio (IRR) for income top 25%, in %	< 35	10	13
	35-49	8	10
	all	8	9

Sources: (a) EU-SILC Austria, own calculations, (b) Statistics Austria, (c) AMS. Notes: Income refers to total annual household income including social transfers and public pension payments. Income and rent are equivalized by household size ("new" OECD scale). Owners are excluded from the analysis. Unemployment rate according to national definition, (d) Age group refers to maximum age in household, (e) Quartiles based on overall distribution of equivalized household income.



for the younger generation, we do not observe a significant increase in this share from 2009 to 2019.

Overall, we do not observe a shift towards less favourable employment or income conditions for younger age groups, distinct from the experience of other groups. This differs from many other European countries, where young adults have faced lower employment security, higher unemployment, and an above-average decline in real incomes since 2008 (Lersch & Dewilde, 2015). Nevertheless, rising house prices, income growth below rent growth, and stagnating rent burdens may, firstly, reduce young adults' ability to save enough for future home purchases and, secondly, reduce their willingness to take out debt to acquire homeownership (Dustmann et al., 2022).

Regional housing policy and young adults under scrutiny

Lower Austria: the role of the regional government

How does regional housing policy intervene to promote homeownership among young adults? Traditionally, the self-build single-family housing sector has received strong support in the form of long-term, low-interest loans. This has been a cornerstone of the Lower Austrian housing subsidy system, which is mainly aimed at young families. Compared to other regions, this is still the case to some extent, as on average in the period 2015–2020 about one third of all newly built single-family houses received such regional loans. In most other regions the share does not exceed 25% (IIBW, 2023). However, even in Lower Austria there is a continuous and strong trend for the share to decrease over time. The average for 2010-2015 was still 56%, and in the early 2000s even about 90% of all newly constructed single-family houses received regional loans. The number of subsidised single-family houses fell from about 3,000 units in 2010 to only about 1,300 units in 2019 and 2020 (information from the Housing Department of Lower Austria). As a result, more and more single-family houses are being built without regional loans, even though, surprisingly, they could be applied for. It seems that market financing conditions were favourable during 2010 and 2020 and many households did not apply for regional loans. Also, building standards (especially thermal energy qualities) for subsidised housing are stricter than the building standards laid down in building regulations that apply to market housing. These factors may help to explain why subsidised self-building of single-family housing has become less prevalent, especially for the age group 35-49.

The multi-storey housing sector is dominated by LPHA housing. Such units are often built with regional subsidies and take three forms: social rental units, rental units with a delayed RTB (right-to-buy for units constructed from 2019 after 5 years, early construction dates after 10 years of renting) and subsidised direct ownership. In the years 2016 to 2020, on average, about 20-30% of the 4,000 annual subsidised units in the housing sector were social rentals, 60-70% were RTB-rentals and only about 10% were subsidised direct ownership (data provided by the regional government, see Amann et al. 2019). The analysis of subsidised dwellings shows that over the last 20 years the RTB scheme has very much replaced the 'subsidised direct ownership' scheme which accounted for over 90% between 2010 and 2015 and has since fallen to only 10%. The reason for this decline lies in the behaviour of LPHAs. They have now opted to realise subsidised units in the form of rental with RTB rather than direct ownership, partly because the direct ownership subsidy scheme is more complex than the RTB scheme, but also because apartments for sale are now being realised in the market-financed sector, where sales prices are higher and have been very dynamic in the last years.

In short, LPHAs have shifted their activity to market-financed construction of apartments for sale, while in the subsidised sector they are now building homes for rent rather than for ownership (GBV, 2023; IIBW, 2023). As of 2023, the incentives to rely on the 'subsidised direct ownership' scheme are insufficient to steer LPHAs in the direction of providing such units on the market (Amann et al., 2019). As a result, the number of subsidised units available for purchase by young adults, who are the main beneficiaries of the scheme, has fallen sharply, and the only units available for purchase are in the market-financed segment (and are therefore much more expensive), or LPHAs units with a RTB. In the case of RTB apartments, surprisingly few are bought after the waiting period. The reasons for this are not entirely clear, but remaining a tenant with a long-term and secure cost-rent seems to be a viable option for current tenants, and the sale prices of RTB units are not strictly determined by law and are therefore often high for young adults (Amann et al., 2019; Mundt et al., 2009). The current framework of subsidy programmes in Lower Austria appears to be unfavourable for ensuring young adults' access to affordable owner-occupied housing.

Vorarlberg: the role of the regional government

Vorarlberg's housing policy has been committed to supporting homeownership for decades. Several funding channels are available for the self-build of single-family houses and for the purchase of new apartments, which are not built by LPHAs (which focus on social rental housing), but by commercial developers under strict guidelines (Amann & Mundt, 2022; IIBW, 2019).

The Vorarlberg model of promoting owner-occupied housing with basic funding and bonuses overall has enabled low-income households to access homeownership. The subsidy has provided property developers with an opportunity to operate in the mid-quality, and thus more affordable, new construction sector. An analysis of the apartment ownership subsidy scheme for the years 2018 to 2021 (Amann & Mundt, 2022) shows that the proportion of young households benefiting from the scheme is very high. 71% of the 1,336 subsidised units between 2018 and 2021 went to the age group up to 34 years, and another 22% to beneficiaries up to 49 years. The average household income of the beneficiaries is EUR 3,363, well below the average regional household income. In total, 29% of the beneficiaries qualify for an additional 'low income bonus' when calculating



the volume of the subsidised loan The support is therefore strongly targeted at low- and middle-income earners.

However, the number of projects implemented has fallen sharply. In the early 2000s, up to 900 subsidised for-sale homes were built annually; in the 2010s, the number stabilised at between 400 and 500; and in 2020, it fell to just 250.

On the other hand, the sales price ceiling of EUR 2,775 per square metre (VAT included, or EUR 2,900/m² for small-scale projects according to regional administration guidelines) has proved to be a challenge for subsidised owner-occupied housing, Commercial developers have preferred to undertake projects in market-financed schemes, where a dynamic market offers higher returns, rather than participate in regionally subsidised schemes. Market developments have rendered the subsidised model ineffective, which negatively impacts buyers with limited resources. Simply raising or removing the price ceilings would only fuel the existing price dynamics. The following section explores alternative options for moving forward 5

Discussion of possible policy adaptations

The previous sections have shown how the regional governments of Lower Austria and Vorarlberg have supported the access to homeownership through different subsidy schemes. Despite the strong focus on young adults and first-time buyers in both regions, we find that the schemes do currently not reach a volume large enough to counter dominant market trends.

In Lower Austria there are several subsidy programmes to promote homeownership. However, the number of subsidised single-family houses has fallen from around 3,000 units in 2010 to only around 1,300 units in 2019 and 2020, and the incentives to rely on the 'subsidised direct ownership' scheme are not sufficient to steer LPHAs in the direction of providing such units on the market. The 'social rent with RTB' scheme has very much replaced the 'assisted direct ownership' scheme, but at the same time not many households choose to buy after the waiting period. The reasons for this have not yet been sufficiently researched.

Similarly in Vorarlberg there are housing subsidy schemes for young households which try to counteract the tendency of declining ownership rates. However, these programmes can only reach newly constructed dwellings, which are few compared to the total housing stock. Targeting firsttime buyers by adjusting requirements is being discussed as a solution. A key concern is the risk that subsidisation could lead to further price increases, which in turn could benefit the subsidised owners but have a negative impact on potential homeowners among young adults through the price mechanism.

Against this background, what can and should regional governments do? The bottom line for housing policymakers is that the growing challenge of intergenerational equity in access to homeownership seems to

have been overlooked. Despite the availability of subsidy schemes, young households have less access to homeownership than previous generations. Taking into account the Austrian housing policy framework and international experience with instruments to promote homeownership among young adults, we suggest four main ways in which the two regional governments in Austria can address this trend.

First, measures should be taken to curb investor-driven price increases that price young families out of volatile markets. Making mortgage credit more accessible and cheaper through blanket instruments (e.g., tax deductions) would further increase price dynamics in supply-inelastic markets (Salvi del Pero et al., 2016). At the federal level, reducing property transfer tax and related fees for first-time buyers could be a way forward. At the regional level, instruments would need to target the supply side of the market, e.g., through 'empty property taxes', which are increasingly being discussed at the regional and local level. Such tax inventions might be an adequate reaction to the trend that underused and vacant dwellings have become more numerous throughout Austria in the last decades (IIBW, 2023; Statistik Austria, 2023c) and have thus lowered the supply of dwellings for household formation. Endearing such dwellings through selective charges or taxes might incentivise owners to put them on the market, especially if such vacancies are due to speculative reasons.

Second, homeownership support schemes are still important. They would need to be modified so that LPHAs and commercial providers could implement them in practice. As land is a limiting factor, more active land banking by regions and municipalities could help to provide affordable land. Good experience has been gained with land funds in Tyrol and Vienna, and, as of 2023, the government of Vorarlberg has declared the intention to establish a land fund following these examples. As subsidised self-build of single-family houses has been criticised for its negative environmental consequences (land use, private transport, infrastructure costs, etc.), the focus should shift to apartment ownership in multi-storey buildings.

Third, strengthening the LPHA right-to-buy scheme as an affordable route to homeownership for young adults is an obvious solution. As only a surprisingly low number of households make use of their RTB option after the waiting period (GBV, 2023), targeted policies should be designed to increase uptake, especially among young adults. Although the Limited Profit Housing Act is a federal law, there is scope for regional policymakers to increase the take-up rate in the RTB sector, e.g., by negotiating purchase price agreements with the regional LPHAs (as the Land of Upper Austria has successfully done).

Fourth, if the decline in homeownership rates among the young is at least partly due to a shift in preference, it is because of the popularity of available tenure alternatives, such as the social rented sector. However, our analysis has shown that private, and not social, renting has been the main substitute for homeownership, especially for the very young and, in fact, young people are



losing ground in the LPHA sector, even though it is growing overall. As private renting is more expensive than social renting, we suspect that this trend cannot be intentional. It offers flexibility, but tenants are foregoing the benefits of early ownership in general and the lower costs (and greater security of tenure) of the social rented sector in particular. An appropriate policy response might be to ensure some form of preferential treatment for young households in the allocation of LPHA rental housing.

Conclusions

We set out to investigate whether common European trends in tenure changes across age groups have also emerged in Austria in the recent past. At the national level and across all age groups, we do not find any major changes between 2010 and 2020. Overall, a slight decline in single-family homeownership is mirrored by an increase in private renting.

However, if we differentiate by age group and extend the analysis to the regional level, we see large changes in tenure shares in the relatively short period of ten years. Younger generations have lost ground in the ownership sector, renting has become much more important for them, and affordability issues, mainly due to increased prices, are at the forefront of the explanatory factors. Moreover, the very young have not benefitted as much as other age groups from the growth of the social rented sector. Our regional analysis shows that the common European challenges of access to homeownership for young adults are materialising in very similar ways in particularly price-dynamic regions of Austria.

Is homeownership still an aspirational dream for younger generations or have priorities shifted? It is difficult to disentangle preferences and constraints with the available data in Austria. However, our analysis of changing homeownership of young households by income group and our focus on the regional level provide some indication of the factors at work. Price increases play a decisive role. While in Austria overall, the ownership rate of young adults up to the age of 35 did not fall sharply, it did so in the very price dynamic region of Vorarlberg, for both houses and apartments. In Lower Austria, the decline was most pronounced for apartments where prices rose much more than for single-family houses.

The drop in ownership rates is likely influenced by affordability issues, because from the preferences perspective, there is a clear shift towards apartments rather than houses. The former are located in urban and semi-urban areas with better access to public transport and tend to be of better quality (due to a more recent construction age). While in general the urbanisation trend can thus explain the shift from single-family houses to apartments, even though prices for the latter have risen more, our more detailed sectoral and local analysis has shown that price increases for owner-occupied apartments play a strongly prohibitive role. These results are in line with McKee's et al. (2017) assessment for the UK that dominant norms of housing consumption are in tension with objective reality, since young people's ability to become

homeowners '... is tempered by their material resources and the local housing opportunities available to them' (idem, p. 318). This tension between the still existing preference for homeownership and disproportionate price developments has its parallels also in Southern Europe, e.g., as shown in a qualitative study on Rome, Italy (Gentili & Hoekstra, 2021).

Capital market conditions, on the other hand, have not become more restrictive during our observation period in Austria. On the contrary, lending conditions were more favourable in the mid and late 2010s than in the immediate aftermath of the 2008 GFC. The fall in interest rates and increased competition between banks made mortgage credit more available to everyone, including young adults. It is only from 2022 onwards that this could change. With higher interest rates, tighter lending rules and strong house price growth, we expect young households to find it more difficult to finance a home in the coming years.

Our analysis has also shown that income and labour market conditions in Austria have not deteriorated as much for young people as in other European countries. In fact, the growth of nominal household income in Austria between 2009 and 2019 was similar for old and young households. However, we observe a disproportionately higher increase in rents and a higher rent burden among low-income young adults. This is problematic as many young households increasingly depend on the private rental sector, where rents are higher than in the social housing sector. It could also have a negative impact on savings, which are important for admittance to a mortgage, thus limiting access to homeownership in the long run. We have shown that this trend is exacerbated by the fact that inheritance is less common today than it was ten years ago. On the other hand, parental support in the form of gifts (as opposed to inheritances) plays an increasingly important role in capital formation. For many young households, the absence of gifts and inheritances is a limiting factor in entering homeownership, and this trend is gaining momentum, especially as down payments on mortgages have become more prohibitive with the recent price rally. Adequate panel data could help future research efforts to better understand the role that the size and timing of inheritances and gifts play in young adults' homeownership decisions.

In the discussion of policy options, we analyse existing regional housing policies and suggest ways forward that make sense within the Austrian housing policy framework. We propose adjustments to the current systems with a strong focus on increasing housing supply at the regional level. Any measures that could contribute to price increases for all, while benefiting only a few, should be avoided.

Notes

- 1. House ownership concerns single-family houses, apartment ownership is used for all individually owned dwellings in the multi-apartment stock.
- 2. In figures 1 to 3 we provide the 95% confidence interval for the tenure shares. Standard errors are provided in Table S1 of the annex.



- 3. The approximately 190 operating limited-profit housing associations (LPHAs) in Austria have a decades-long tradition and strong legal and financial support from all regions of Austria. The rental housing they provide follows a strict legal framework and is limited in initial rent levels and annual adjustments. It is much cheaper than private rental housing (Mundt, 2018).
- 4. This reflects a typical Austrian "tenure career": parents transfer their real estate to offspring while they continue to live in it. Statistically, they no longer appear as owners. Additionally, the very old often live in homes and institutions and not in their own property.
- 5. Another development has reduced households' access to affordable household finance. The share of foreign currency loans in CHF was particularly high in Vorarlberg due to its proximity to Switzerland and strong economic ties. These loans had favourable conditions and were extensively used for real estate transactions. However, loans of this nature were curtailed in the last decade following concerns raised by the Austrian Central Bank and supervisory authority. As a result, financing conditions lost their comparative advantage compared to other Austrian Länder (Mundt & Springler, 2016).

Disclosure statement

No potential conflict of interest was reported by the author(s).

References

- Albacete, N., Lindner, P., & Wagner, K. (2021). Eurosystem household finance and consumption survey 2021: Methodological notes for Austria. OeNB.
- Amann, W., Kratschmann, A., Schmidinger, J., & Weber, M. (2019). Forcierung der Förderungsschiene Soforteigentum in Niederösterreich (Report NÖ Wohnbauforschung, F-2274). IIBW.
- Amann, W., & Mundt, A. (2022). Wohnungseigentumsförderung in Vorarlberg. Study commissioned by Land Vorarlberg. IIBW.
- Angel, S., & Gregory, J. (2021). Does housing tenure matter? Owner-occupation and wellbeing in Britain and Austria. Housing Studies, 38(5), 860-880. https:// doi.org/10.1080/02673037.2021.1912714
- Arundel, R. (2017). Equity inequity: Housing wealth inequality, inter and intra-generational divergences, and the rise of private landlordism. Housing, Theory and Society, 34(2), 176-200. https://doi.org/10.1080/14036096.2017.1284154
- Arundel, R., & Doling, J. (2017). The end of mass homeownership? Changes in labour markets and housing tenure opportunities across Europe. Journal of Housing and the Built Environment: HBE, 32(4), 649-672. https://doi.org/10.1007/s10901-017-9551-8
- Arundel, R., & Lennartz, C. (2018). Dualization in labour markets and housing outcomes. Insiders versus outsiders. HOUWEL working paper series number 12.
- Arundel, R., & Ronald, R. (2016). Parental co-residence, shared living and emerging adulthood in Europe: Semi-dependent housing across welfare regime and housing system contexts. Journal of Youth Studies, 19(7), 885–905. https://doi.org/10 .1080/13676261.2015.1112884
- Arundel, R., & Ronald, R. (2021). The false promise of homeownership: Homeowner societies in an era of declining access and rising inequality. Urban Studies, 58(6), 1120-1140. https://doi.org/10.1177/0042098019895227
- BBSR (=Federal Institute for Research on Building, Urban Affairs and Spatial Development (ed). (2022). Housing policies in the EU. Federal Office for Building and Regional Planning.
- Beer, C., & Wagner, K. (2017). Household's housing expenditure in Austria, Germany and Italy. Monetary Policy and the Economy, Q4/17, 48-61.



- Bryant, G., Spies-Butcher, B., & Stebbing, A. (2024). Comparing asset-based welfare capitalism: Wealth inequality, housing finance and household risk. Housing Studies, 39(2), 459-480. https://doi.org/10.1080/02673037.2022.2056150
- Byrne, M. (2020). Towards a political economy of the private rental sector. Critical Housing Analysis, 7(1), 103-113. https://doi.org/10.13060/23362839.2020.7.1.507
- Castles, F.G. (1998). The really big trade-off: Home-ownership and the welfare state in the new world and the old. Acta Politica, 33(1), 5-19.
- Clapham, D., Mackie, P., Orford, S., Thomas, I., & Buckley, K. (2014). The housing pathways of young people in the UK. Environment and Planning A: Economy and Space, 46(8), 2016-2031. https://doi.org/10.1068/a46273
- Delfani, N., De Deken, J., & Dewilde, C. (2015). Poor because of low pensions or expensive housing? The combined impact of pension and housing systems on poverty among the elderly. International Journal of Housing Policy, 15(3), 260-284. https://doi.org/10.1080/14616718.2015.1004880
- Deutsch, E. (2009). The Austrian social rented sector at the crossroads for housing choice. European Journal of Housing Policy, 9(3), 285-311. https://doi. org/10.1080/14616710903138775
- Dewilde, C. (2020). Exploring young Europeans' homeownership opportunities. Critical Housing Analysis, 7(1), 86–102. https://doi.org/10.13060/23362839.2020.7 .1.506
- Dewilde, C., & Raeymaeckers, P. (2008). The trade-off between home-ownership and pensions: Individual and institutional determinants of old-age poverty. Ageing and Society. 2008, 28(6), 805-830. https://doi.org/10.1017/ S0144686X08007277
- Dietz, R., & Haurin, D. (2003). The social and private micro-level consequences of homeownership. Journal of Urban Economics, 54(3), 401-450. https://doi. org/10.1016/S0094-1190(03)00080-9
- Doling, J., & Horsewood, N. (2010). Home ownership and pensions: Causality and the really big trade-off. Housing, Theory and Society, 28(2), 166-182. https://doi. org/10.1080/14036096.2010.534269
- Doling, J., & Ronald, R. (2010). Home ownership and asset-based welfare. Journal of Housing and the Built Environment, 25(2), 165-173. https://doi.org/10.1007/ s10901-009-9177-6
- Dustmann, C., Fitzenberger, B., & Zimmermann, M. (2022). Housing expenditure and income inequality. The Economic Journal, 132(645), 1709-1736. https://doi. org/10.1093/ej/ueab097
- Elsinga, M., & Hoekstra, J. (2015). The Janus face of homeownership-based welfare. Critical Housing Analysis, 2(1), 32-41. https://doi.org/10.13060/23362839.2015.2. 1.174
- Fessler, P., Lindner, P., & Schürz, M. (2021). Eurosystem household finance and consumption survey 2021: First results for Austria. OeNB.
- Filandri, M., & Bertolini, S. (2016). Young people and home ownership in Europe. International Journal of Housing Policy, 16(2), 144–164. https://doi.org/10.1080/1 4616718.2015.1130606
- Financial Stability Report (FSR) 41 June 2021. 2021. OeNB.
- Financial Stability Report (FSR) 43 June 2022. 2022. OeNB.
- Forrest, R., & Yip, N. (2012). Housing young people: Transitions, trajectories and generational fractures. Taylor & Francis.
- Friesenecker, M., & Kazepov, Y. (2021). Housing Vienna: The socio-spatial effects of inclusionary and exclusionary mechanisms of housing provision. Social Inclusion, 9(2), 77-90. https://doi.org/10.17645/si.v9i2.3837



- Fuster, N., Arundel, R., & Susino, J. (2019). From a culture of homeownership to generation rent: Housing discourses of young adults in Spain. Journal of Youth Studies, 22(5), 585-603. https://doi.org/10.1080/13676261.2018.1523540
- GBV. (2023). Verbandsstatistik 2023. GBV.
- Gentili, M., & Hoekstra, J. (2021). Homeownership out of reach? Intergenerational transfers and homeownership reproduction in middle class families in Rome, Italy. Cities, 116, 103277. https://doi.org/10.1016/j.cities.2021.103277
- Hick, R., & Stephens, M. (2023). Housing, the welfare state and poverty: On the financialization of housing and the dependent variable problem. Housing, Theory and Society, 40(1), 78-95. https://doi.org/10.1080/14036096.2022.2095438
- IIBW. (2019). Performance der Vorarlberger Wohnbauförderung. Study commissioned by Land Vorarlberg. IIBW.
- IIBW. (2023). Wohnbauförderung in Österreich 2022. IIBW.
- IMAS International. (2021). Wohnstudie 2021. Österreich Aufholbedarf bei Eigentum. Study commissioned by Erste Bank and s Bausparkasse. IMAS International.
- Kadi, J. (2015). Recommodifying housing in formerly "Red" Vienna? Housing, Theory and Society, 32(3), 247-265. https://doi.org/10.1080/14036096.2015.1024885
- Kadi, J., Hochstenbach, C., & Lennartz, C. (2020). Multiple property ownership in times of late homeownership: A new conceptual vocabulary. International Journal of Housing Policy, 20(1), 6-24. https://doi.org/10.1080/19491247.2019.1697514
- Kadi, K., & Lilius, J. (2022). The remarkable stability of social housing in Vienna and Helsinki: A multi-dimensional analysis. Housing Studies, 1-25. https://doi.or g/10.1080/02673037.2022.2135170
- Kemeny, J. (1981). The myth of home ownership: Public versus private choices in housing Tenure. Routledge.
- Kunnert, A. (2016). Leistbarkeit von Wohnen in Österreich. Operationalisierung und demographische Komponenten. WIFO.
- Lennartz, C., Arundel, R., & Ronald, R. (2016). Younger adults and homeownership in Europe through the global financial crisis. Population, Space and Place, 22(8), 823-835. https://doi.org/10.1002/psp.1961
- Lennartz, C., & Helbrecht, I. (2018). The housing careers of younger adults and intergenerational support in Germany's 'society of renters'. Housing Studies, 33(2), 317-336. https://doi.org/10.1080/02673037.2017.1338674
- Lersch, P., & Dewilde, C. (2015). Employment insecurity and first-time homeownership: Evidence from twenty-two European countries. Environment and Planning A: Economy and Space, 47(3), 607–624. https://doi.org/10.1068/a130358p
- Lunde, J., & Whitehead, C. (2021). How taxation varies between owner-occupied, private renting and other housing tenures in European countries. CaCHE.
- Lux, M., & Sunega, P. (2012). Labour mobility and housing: The impact of housing tenure and housing affordability on labour migration in the Czech Republic. *Urban Studies (Edinburgh, Scotland)*, 49(3), 489–504. https://doi.org/10.1177/0042098 011405693
- Matznetter, W., & Mundt, A. (2012). Housing and welfare regimes. In Clapham, D., Clark, W. & Gibb, K. (Eds.), The SAGE handbook of housing studies (pp. 274–294).
- Matznetter, W. (2002). Social housing policy in a conservative welfare state: Austria as an example. Urban Studies, 39(2), 265-282. https://doi.org/10.1080/ 00420980120102966
- McKee, K., Moore, T., Soaita, A., & Crawford, J. (2017). Generation rent and the fallacy of choice. International Journal of Urban and Regional Research, 41(2), 318-333. https://doi.org/10.1111/1468-2427.12445



- Mundt, A., & Springler, E. (2016). Milestones in housing finance in Austria over the last 25 years. In Lunde, J. & Whitehead, C. (Eds.), Milestones in European housing finance (pp. 55–73). Wiley-Blackwell.
- Mundt, A. (2018). Privileged but challenged: The state of social housing in Austria in 2018. Critical Housing Analysis, 5(1), 12-25. https://doi.org/10.13060/2336283 9.2018.5.1.408
- Mundt, A., Amann, W., & Komendantova, N. (2009). Kaufoptionswohnungen der Gemeinnützigen – Strategien für hohe Verkaufsquoten. Study commissioned by Land Niederösterreich, IIBW.
- OECD. (2021). Building for a better tomorrow: Policies to make housing more affordable. Employment., Labour and Social Affairs Policy Briefs. OECD.
- OECD. (2022). Housing taxation in OECD countries, OECD tax policy studies, No. 29., OECD Publishing.
- OECD. (2024). OECD affordable housing database. Online: https://www.oecd.org/ housing/data/affordable-housing-database/ [11.1.2024].
- OeNB (= Austrian Central Bank). (2022). Household finance and consumption survey. https://www.hfcs.at/en/ [11.1.2024].
- ÖROK. (2022). ÖROK-Regionalprognosen. 2021 bis 2050: Bevölkerung. ÖROK.
- Pawson, H., Martin, C., Lawson, J., Whelan, S., & Aminpour, F. (2022). Assisting first homebuyers: An international policy review (AHURI Final Report No. 381). Australian Housing and Urban Research Institute Limited.
- Ronald, R., & Kadi, J. (2018). The revival of private landlords in Britain's post-homeownership society. New Political Economy, 23(6), 786-803. https://doi.org/10.108 0/13563467.2017.1401055
- Salvi del Pero, A., Adema, W., Ferraro, V., & Frey, V. (2016). Policies to promote access to good-quality affordable housing in OECD countries (=OECD Social, Employment and Migration Working Papers, No. 176).
- Schwartz, H., & Seabrooke, L. (2008). Varieties of residential capitalism in the international political economy: Old welfare states and the new politics of housing. Comparative European Politics, 6(3), 237–261. https://doi.org/10.1057/cep.2008.10
- Statistik Austria. (2021). Wohnen 2020. Mikrozensus-Wohnungserhebung und EU-SILC. Statistik Austria.
- Statistik Austria. (2023a). Migration & integration. Zahlen. Daten. Indikatoren 2023. Statistik Austria.
- Statistik Austria. (2023b). Demographisches Jahrbuch 2022. Statistik Austria.
- Statistik Austria. (2023c). Wohnen 2023. Mikrozensus-Wohnungserhebung und EU-SILC. Statistik Austria.
- Stebbing, A., & Spies-Butcher, B. (2016). The decline of a homeowning society? Asset-based welfare, retirement and intergenerational equity in Australia. Housing Studies, 31(2), 190-207. https://doi.org/10.1080/02673037.2015.1070797
- Stephens, M., Lux, M., & Sunega, P. (2015). Housing: Asset-based welfare or the engine of inequality? Critical Housing Analysis, 2(1), 22-31. https://doi.org/10.13 060/23362839.2015.2.1.173
- Wagner, K. (2014). Intergenerational transmission: How strong is the effect of parental homeownership? Monetary Policy and the Economy, Q2/14, 49-64.
- Whitehead, C., & Williams, P. (2017). Changes in the regulation and control of mortgage markets and access to owner-occupation among younger households, OECD Social, Employment and Migration Working Papers No. 196, OECD Publishing.
- Wind, B., Dewilde, C., & Doling, J. (2020). Secondary property ownership in Europe: Contributing to asset-based welfare strategies and the 'really big trade-off'. International Journal of Housing Policy, 20(1), 25-52. https://doi.org/10.1080/194 91247.2019.1573961