Policy Actions for Affordable Housing in Latvia

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Housing affordability and quality are pressing challenges in Latvia. A long-term well-resourced comprehensive housing strategy is needed to address them.

Foreword

Housing affordability and quality are pressing challenges in Latvia. While Latvian households spend, on average, less on housing than their OECD peers, many are stuck in poor quality housing. Residential investment has stagnated since 2008, and the housing stock – much of which was built during the Soviet era – has been insufficiently maintained. In the face of these challenges, public support for housing is limited, with a large share of households who are too rich to be eligible for benefits and social housing, yet too poor to afford a commercial mortgage. Meanwhile, an underdeveloped rental market further limits affordable housing alternatives.

This study builds on the extensive work conducted by the OECD on housing and economic development to help Latvia assess the need for policy intervention, set criteria to identify eligible households for public support, and develop a policy package to make housing more affordable.

The study highlights the need for Latvia to develop a long-term, well-resourced comprehensive housing strategy. Drawing on cross-country experience and a series of illustrative simulations of different types of public support for housing, the study provides practical policy directions to inform the implementation of this strategy. Key recommendations include facilitating long-term housing investment, calibrating housing support for different types of households, developing a more affordable, attractive private rental market, and improving the measurement and monitoring of housing affordability and quality.

The study is the result of the work of an interdisciplinary OECD team bringing together the Economics Department (ECO) and the Directorate for Employment, Labour and Social Affairs (ELS), with the support of the Ministry of Economics of the Republic of Latvia. It reflects insights and peer learning from an OECD Expert Workshop on housing affordability, jointly organised with the Ministry of Economics, held in Riga in November 2019. The study contributes to the cross-cutting OECD Horizontal Project on Housing.

Acknowledgments

The work underlying the study was co-ordinated by Daniela Glocker, Filippo Cavassini (ECO) and Marissa Plouin (ELS). Nicola Brandt (formerly ECO) was instrumental in starting the project and contributed to the early phases. The study was prepared by Marissa Plouin, Chris Clarke (ELS), Daniela Glocker and Filippo Cavassini (ECO), with extensive inputs from Isabell Koske, Deputy Director, Country Studies (ECO) and Willem Adema, Senior Economist (ELS). Alvaro Pereira, Director, Country Studies (ECO), Stefano Scarpetta, Director, Mark Pearson, Deputy Director, and Monika Queisser, Head, Social Policy Division (ELS), provided guidance and inputs to the study. Christophe André (ECO), Jonas Fluchtmann (ELS) and Francesca Papa (ECO) contributed to the study. Olga Rastrigina (ELS) conducted the EUROMOD simulation and associated analysis. The authors also gratefully acknowledge the contributions of József Hegedüs and Hanna Szemző (Metropolitan Research Institute) and Knut Höller (Housing Initiative for Eastern Europe). Mathieu Miranda (ECO) provided support throughout the preparation of the study. Andrew Esson prepared the study for publication.

The study benefitted from inputs and insights from the participants in the OECD expert workshop on housing affordability. Special thanks to Gerald Kössl, Austrian Federation of Limited Profit Housing Associations (Austria), Solveig Råberg Tingey, BL-The Danish Social Housing Association (Denmark) and Elena Szolgayova, Ministry of Transport and Construction (Slovak Republic) for their valuable inputs to the study. Last but not least, special thanks go to Edmunds Valantis, State Secretary of the Ministry of Economics of Latvia, Rūta Lastovska, Officer, Housing Policy Department, Ministry of Economics, Skaidrīte Rancāne-Slavinska, Economic Counsellor, Permanent Delegation of Latvia to the OECD, for their support throughout the preparation of the study.

Left: Aerial view of Jurmala.

KEY MESSAGES AND POLICY DIRECTIONS

Few households suffer from high housing costs, but many are stuck in poor quality housing

As a legacy of the privatisation of the housing stock that occurred after the fall of Communism, Latvia is a country of homeowners, with seven out of ten households owning their home outright. Average household spending on housing is below the OECD average, and few households are overburdened by housing costs – that is, spend more than 40% of their disposable income on housing.

Yet, low spending on housing masks a different challenge: poor housing quality, which affects households across the income spectrum. The majority of the housing stock was developed during the Soviet era and has been insufficiently maintained. Over a third of households live in overcrowded dwellings, the largest share in the OECD, and around a quarter of poor households (those living on less than 50% of the median equivalised disposable income) live in dwellings without basic facilities, compared to an OECD average of less than 7% and an EU average of less than 6%. Some people cannot afford upgrades: almost three in ten households report housing maintenance expenditures to be a heavy financial burden.

The quality challenge is compounded by the fact that many households are not able to move to a better-quality home. Affording a mortgage to buy a home remains out of reach for many people. Based on OECD simulations, fewer than half (43%) of all Latvian households could afford a new mortgage on a 50 square-meter apartment, while only 27% could afford a mortgage on a 75 square-meter apartment. The challenge is especially large for single-person and single-parent households. Since 2010, house prices in Latvia have steadily increased to return to about 2006 levels. This increase is partly in line with income growth, but is also driven by a rise in construction costs that has resulted from a shortage of skilled labour and the increased cost of building materials.

The small formal rental housing market in Latvia largely targets upper-income households, partly a consequence of rental regulations that have historically provided insufficient protections for landlords. Property owners price in potential risks of financial losses by setting higher rent levels. In this environment, rent prices have increased by over 60% since 2005, and the price-to-rent ratio suggests that buying a dwelling is generally more attractive than renting. Households that do not have sufficient income to purchase a house or an apartment therefore only find themselves with the option of paying high rents. Pending legislation seeks to rebalance the landlord-tenant relation and could be a first step towards greater incentives for property owners to rent out dwellings.

The functioning of the housing market has important implications for individual well-being and economic development, and also takes a toll on labour mobility. Residential mobility in Latvia is very low (well below the EU average) and even lower for employment-related reasons, which poses a barrier to matching jobs with job-seekers. In fact, job vacancy rates have been increasing across the country through 2019. Improving housing conditions could positively impact economic development and well-being, among others, by providing greater opportunities to move where jobs are in greater demand.

Public support for housing is limited, and many people do not receive any support

Public support for housing targets a small share of low-income and vulnerable households, and the level of support is limited. Social rental housing and housing allowances are the primary forms of support for people at the bottom end of the income distribution.

However, at less than 2% of the total housing stock, Latvia has one of the smallest social housing stocks in the OECD, and housing allowances reached less than 7% of the total population, and just under 18% of the poorest households in 2017. Further, the amount of the housing benefit is low: using the rules in Riga, a low-earning (bottom decile) family with a single-earner and two children would receive housing benefits amounting to EUR 363 per year in 2018, equivalent to roughly 7% of their gross earnings (EUR 5 122 per year). This is less than half the average amount received by otherwise similar families in other OECD countries that provide housing benefits (15% of gross earnings).

In addition, the government offers a mortgage guarantee to families with children and young specialists (under age 35 with vocational secondary or higher education). This support tends to benefit higher-income households living in the Riga region, as beneficiaries must have a sufficient income to qualify for a commercial loan, and banks concentrate most of their lending in and around Riga.

Existing housing support thus leaves out a large share of Latvian households – what we term in this report as the "missing middle" – corresponding to around 44% of all households who are too rich to receive social housing or the housing allowance, and too poor to afford a mortgage (a minor share of whom would be, in addition, eligible for a publicly-backed mortgage guarantee). These households are not adequately served by either public supports or the private sector. The "missing middle" spans much of Latvia's income distribution, yet most people are concentrated among the second and third income quintile, who fall above the income threshold to qualify for the housing benefit. Single-person, single-parent and elderly households are most likely to find themselves in the "missing middle," along with around one in five two-adult with children families. The small size of the private rental market means that these households have few affordable housing alternatives.

Recommended policy directions

A central message of the study is that Latvia should develop a ***comprehensive housing strategy***. This strategy would ideally:

- ***Be long-term and well resourced***. This strategy should take a long-term view to housing and set short-, medium- and long-term priorities. A set of measures that could be implemented over the strategy's horizon would help meet these priorities. Implementation of the strategy would need to be backed by adequate resources to support investment in renovation and construction. Taking a long-term view would help spread resource requirements over a number of years and better manage the fiscal impact of any intervention.

- ***Be quality-focused***. The strategy should focus on addressing the housing quality gap as a key need in Latvia. It should channel resources for improvements of the existing housing stock and support construction of affordable housing where it is most needed.

- ***Be co-ordinated***. Affordability efforts should be co-ordinated with efforts to improve the essential infrastructure supporting housing investment at the national and municipal level. The strategy should pay adequate attention to regional trends and differences in terms of housing quality and costs, as well as access to essential services, like schools and health facilities, as well as commercial and cultural activities when considering investments in affordable housing.

- ***Be innovative***. As quality and renovation will be a key priority, the strategy should be smart and innovative in designing and choosing its implementation tools and identifying a few "demonstration projects" that can show the results and advantages of improving the

quality of the housing stock. It should make the best possible use of existing and planned programmes aimed at improving energy efficiency and renovating buildings. It should reach out to housing managers and residents on the importance of renovation. This will require efforts to build capacities among actors in the housing market to manage and carry out the proposed recommendations.

The following policy directions could guide the development and implementation of the housing strategy:

Improve assessment of housing affordability and quality, and evaluate needs

- ***Undertake a comprehensive assessment of the technical quality of dwellings***. Such an assessment is essential to gauge the maintenance and renovation needs and the level of required investment; it could build on the recent audit of a selection of the housing stock in Latvia. It should also include an assessment of the energy efficiency of the housing stock. This type of large-scale assessment of the housing stock should be a priority in Latvia, and European funding could be available.

- ***Improve the monitoring of housing affordability.*** A dedicated housing survey could regularly collect data to monitor housing affordability across different income levels, household types and regions. An alternative option would be to add questions on housing affordability and quality to an existing household survey.

Invest more in quality affordable housing and reduce construction costs

- ***Consider establishing a revolving fund to support upgrades to the housing stock, where upgrades are determined to be most cost-effective, and new affordable housing development***. Such a fund could borrow and use EU structural funds to provide cheap long-term financing, with a limited impact on the national budget. A share of rents and/or loan repayments could build up the fund's capital over time. The fund could complement loans from commercial banks. Simulations presented in this report suggest that financial support for housing improvements (through, for instance, long-term loans provided by revolving funds and housing associations) could be an efficient means of expanding the supply of affordable, quality housing.

- ***Reduce administrative costs related to construction***. The Construction Law was recently amended to streamline and digitalise construction permit procedures. This is a welcome development that should favourably impact construction costs. It will be important to continue to ensure that construction regulations minimise unnecessary administrative burden.

- ***Explore innovative approaches to enhance the environmental quality and reduce costs of affordable housing development.*** Public authorities and the construction industry can collaborate to facilitate the use of innovative methods for building affordable housing projects. This could include the use of serial and modular constructions and new technologies like 3D printers. Time and cost gains can be significant.

Develop a more affordable, attractive private rental market

- ***Level the playing field in the private rental market to support more attractive and affordable rental options, which could be particularly beneficial in the Riga region and other urban areas.*** A pending legislative reform aiming to rebalance tenant-landlord relations can help create more favourable conditions for the rental market. However, it will be important to ensure that re-balancing is not excessive so as to hinder tenant security, which could reduce long-term demand for rental housing.

- ***Diversify the offer of housing providers***. Competencies of municipal housing companies could be expanded to include the development and management of rental or mixed-tenure properties. Facilitating the development of non-profit and/or limited-profit providers could make rents more affordable and help leverage additional resources (public and private) to invest in affordable rental housing.

Close the gap among the "missing middle", by better calibrating housing support for different households

- ***Consider developing a housing refurbishment programme,*** which could provide financial support to conduct technical upgrades (e.g. plumbing, roofing), as well as energy efficiency upgrades. Such support could benefit households across the income spectrum, helping to improve housing quality for a large share of the population.

- ***Expand housing support for lower-income households.*** The Latvian authorities could increase the generosity of the housing benefit and enable more people at the lower end of the "missing middle" to access the benefit. Simulations presented in this report suggest that reforms to the housing benefit, notably by introducing an earnings disregard in the eligibility rules could meaningfully increase both the coverage and generosity of the benefit. At the same time, it will be important to combine an expanded housing benefit scheme with investments to increase the supply of quality, affordable housing as recommended above; such combined efforts will be more effective in supporting affordability objectives than increased housing benefits alone.

- ***Make housing support to moderate-income households, including families with children, conditional on income and dwelling size***. Latvia could introduce additional financial support to help moderate-income households, including families with children, afford a mortgage, through means-tested grants or loans, and consider restrictions on the size or the purchase price of the dwelling to avoid subsidising unnecessary expansions or bigger dwellings. In addition to financial support schemes to facilitate home ownership, these households could be accommodated by rental and owner-occupied housing developed by non-profit and co-operative providers, which would be less expensive to access than the current requirements for moderate-income households to obtain a commercial loan.

The Covid-19 pandemic, which has been unfolding at the time of publishing this study, has highlighted just how important housing issues are to people. Across countries, governments have introduced emergency housing policy measures to address immediate challenges, such as temporary suspensions of evictions, foreclosures or rent increases, or emergency housing solutions for the homeless. However, the pandemic has also underscored the need for governments to develop more structural responses to deal with persistent housing challenges. To that end, this study assesses the key underlying pre-Covid-19 housing policy issues in Latvia and proposes a series of recommendations to support policy makers in delivering more quality, affordable housing.

Soviet-era highrise apartment building in the Purvciems district of Riga.

Household spending on housing is relatively low but many people live in low-quality dwellings and cannot afford a new home.

1. Introduction and overview

Access to good-quality affordable housing is a fundamental need and key to achieving a range of economic and social policy objectives. Many Latvian households, as in many other OECD countries, struggle to find good quality affordable housing, as a result of urbanisation, migration, labour mobility and demographic changes, as well as the mass privatisation of dwellings in the country's transition to a market economy. Different measures of housing affordability and housing quality point to challenges for households in the housing market: high household spending on housing, overcrowding, housing of poor quality or in suboptimal locations, inadequate access to services, or insecure tenure.

Housing policies are crucial for inclusive economic development. Not only can they influence the extent to which households build wealth, but they can also affect the degree to which people have access to economic opportunities. Being able to afford quality housing can influence labour market efficiency by enabling (or preventing) workers to move around in the economy (see Section 2.1). A range of other policy areas affect housing outcomes, including taxation and financial regulations, land use and local planning, local public finance, transport and infrastructure investments, social and welfare support, to name a few. Thus, many different public policies can – intentionally or not – affect housing affordability and quality, as well as the composition and liveability of neighbourhoods.

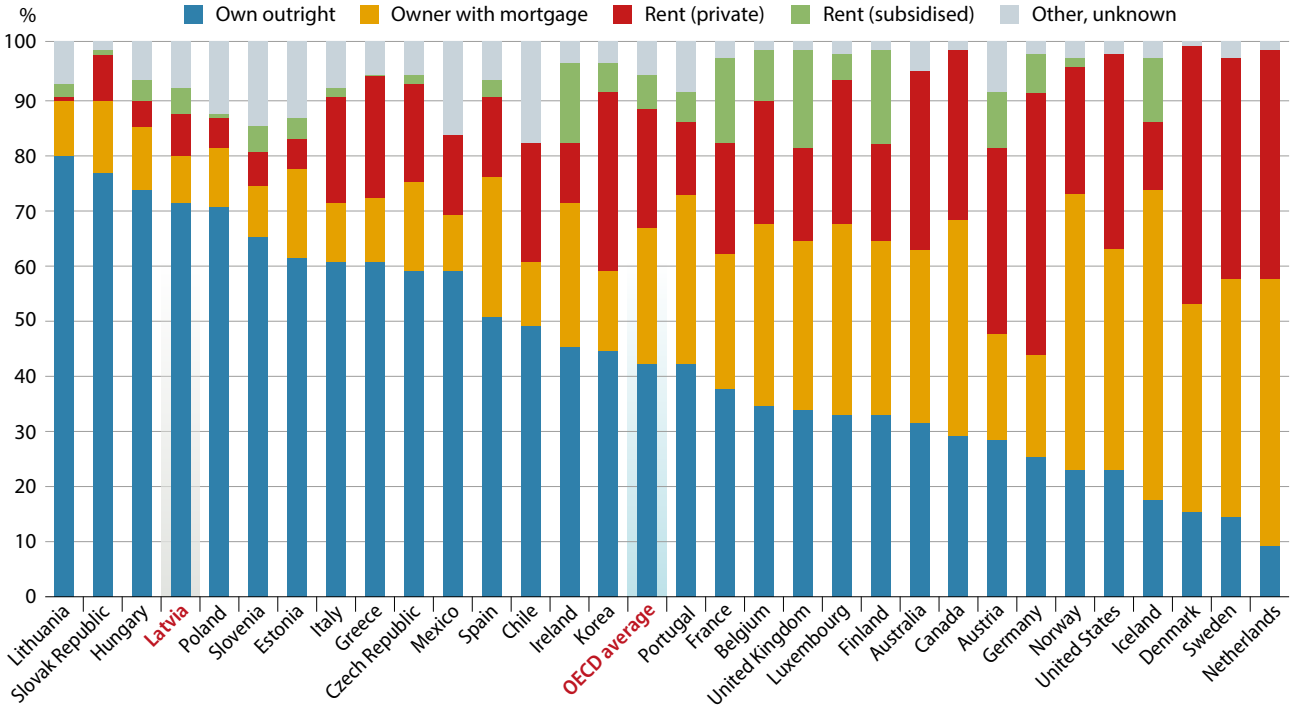
Latvia's housing affordability challenge differs from that in many other OECD countries. Latvia has a high home ownership rate, including among low-income groups, a result of the housing stock privatisation in the 1990s. Typical housing affordability indicators suggest that, on average, most Latvian households are not overpaying for housing: average household spending on housing is lower than in most OECD countries, and the share of households spending more than 40% of their disposable income on housing costs is one of the lowest in the OECD. However, purchasing new housing remains out of reach for most households, and an underdeveloped rental market further limits affordable housing alternatives. Further, poor housing quality is a problem for households across most income levels, affecting 35% of outright owners in the bottom quintile, and 20% in the middle quintile of the income distribution. At the same time, residential investment (i.e. net additions to the housing stock and housing improvements) has been stagnating since 2008, accounting for around 2% of GDP, compared to an OECD average of 5% of GDP.

This report is divided into four chapters. This brief introduction provides an overview of the context and evolution of the housing market in Latvia. The second chapter provides insights into housing affordability metrics, as well as an assessment of housing affordability in Latvia, focusing on the housing outcomes of households across tenure types, income levels, ages and regions. The third chapter discusses the importance of promoting housing affordability, followed by a snapshot of current housing policy and spending priorities in Latvia and across the OECD. The fourth and final chapter presents a series of policy directions to promote more affordable housing in Latvia, focusing on strategies to i) invest more in good quality affordable housing; ii) develop a more affordable, attractive rental market; iii) expand support to lower-income households and calibrate support for families with children; and iv) reduce construction and development costs. The final chapter includes some simulations that illustrate the possible impacts of different types of policy interventions, both in terms of the potential share of the population for whom housing could be made more affordable with a given type and level of support, as well as the potential financial resources that could be required. The study concludes with a series of considerations for priority actions.

EVOLUTION OF THE LATVIAN HOUSING MARKET

Like many former Communist countries in Central and Eastern Europe, home ownership is by far the dominant tenure in the Latvian housing market. Just over 7 out of 10 Latvian households live in housing that is owned outright (e.g. without an outstanding mortgage or housing loan), which is well above the OECD average of just under 43% (Figure 1.1). Fewer than 9% of Latvian households live in owner-occupied

Figure 1.1. **Housing tenure distribution, 2018 or latest year available**
Share of households in different tenure types, in percent



Note: Tenants renting at subsidised rent are grouped together with tenants renting at private rent in Australia, Canada, Chile, Denmark, Mexico, the Netherlands and the United States, and are not capturing the full extent of coverage in Sweden due to data limitations.

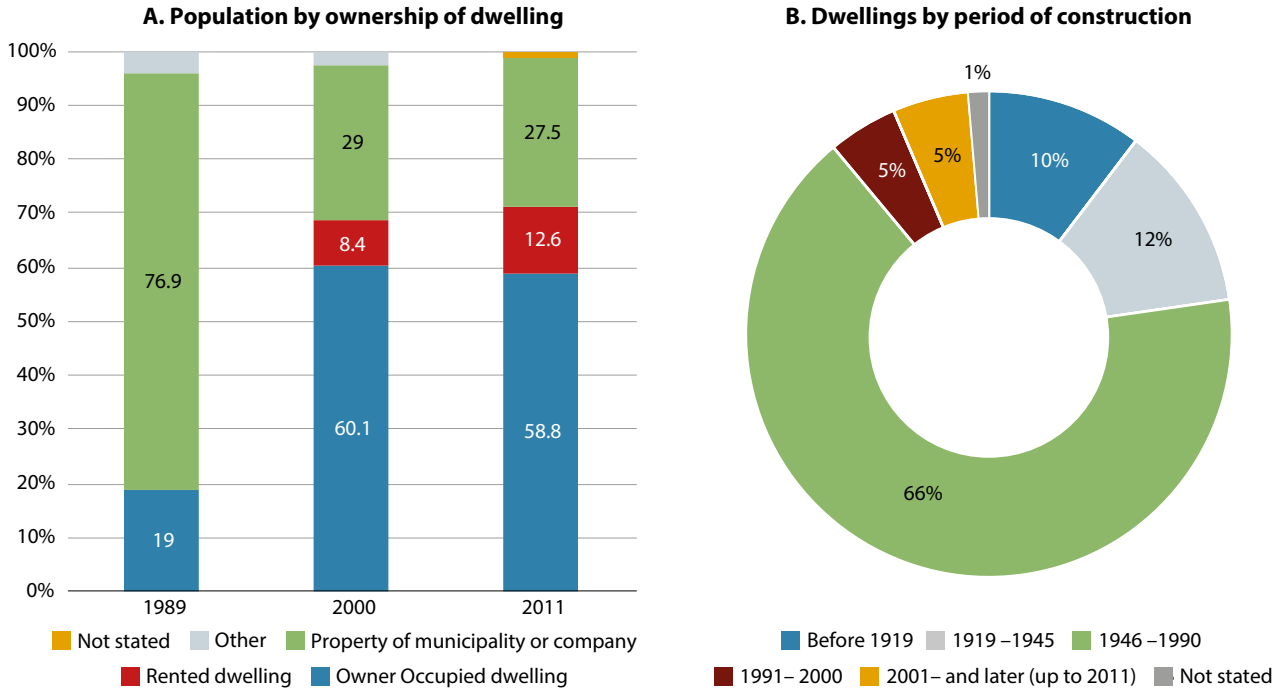
Source: OECD Affordable Housing Database, Indicator HM1.3. OECD calculations based on European Union Statistics on Income and Living Conditions (EU SILC) survey 2018 except for Ireland, the Slovak Republic, and the United Kingdom (2017), and Iceland (2016); the Household, Income and Labour Dynamics Survey (HILDA) for Australia (2017); the Canada Income Survey (CIS) for Canada (2016); Encuesta de Caracterización Socioeconómica Nacional (CASEN) for Chile (2017); the Korean Housing Survey (2017); Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH) for Mexico (2016); American Community Survey (ACS) for the United States (2016).

housing with a mortgage, which is significantly lower than the OECD average of almost 25%. Meanwhile, Latvia's rental market, consisting of both private and subsidised rentals, is very small from an international perspective, representing around 12% of all household tenures; the rental housing makes up on average 28% of housing tenure in the OECD. There is a sizeable "shadow" rental market in Latvia (European Commission, 2019[1]), whereby apartments are let without paying rental income tax and/or in absence of formal contracts though there are no data to indicate the size of this segment of the market. Lithuania, the Slovak Republic, Hungary, Poland, Slovenia and Estonia have a broadly similar housing tenure structure.

The dominance of home ownership in Latvia and other countries in the region results from the privatisation of the housing stock that followed the transition to a market economy. During the communist era, private housing was virtually non-existent. The rental housing stock was publicly owned, with rental units allocated by public authorities on a permanent basis. Following the transition to a market economy, the public housing stock was transferred into private hands by two main processes that continue to shape the housing sector: first, through the mass privatisation of state-owned housing, and second, through the restitution of the formerly nationalised housing stock. Together, these processes resulted in a very large share of owner-occupied housing. The privatisation was the most significant transition-related determinant of the housing-market structure in the post-communist time; the restitution of housing property only affected the small part of the housing stock that had been built before 1945 (Hegedus, Tosics and Mayo, 1996[2]). While roughly 19% of dwellings were privately owned at the end of the 1980s, this share had increased to about 60% by 2011 (Figure 1.2). Currently, more than 60% of dwellings consist of apartments in a building with 10 or more units; detached houses are the next-largest dwelling type, comprising 26% of the total housing stock in 2018 (CSB, 2019).

Figure 1.2. **The majority of the housing stock was built in the Soviet period and is dominated by owner-occupied dwellings**

Based on Population Census 1989, 2000 and 2011



Note: In each Census, the answer options to the question on type of ownership of dwelling were slightly different. In 1989, Owner-occupied and rented dwelling were combined as property of the population; in 2000, property of municipality or company was indicated separately from "other". In 2011, Dwellings in other types of ownership are aggregated with property of municipality or company.

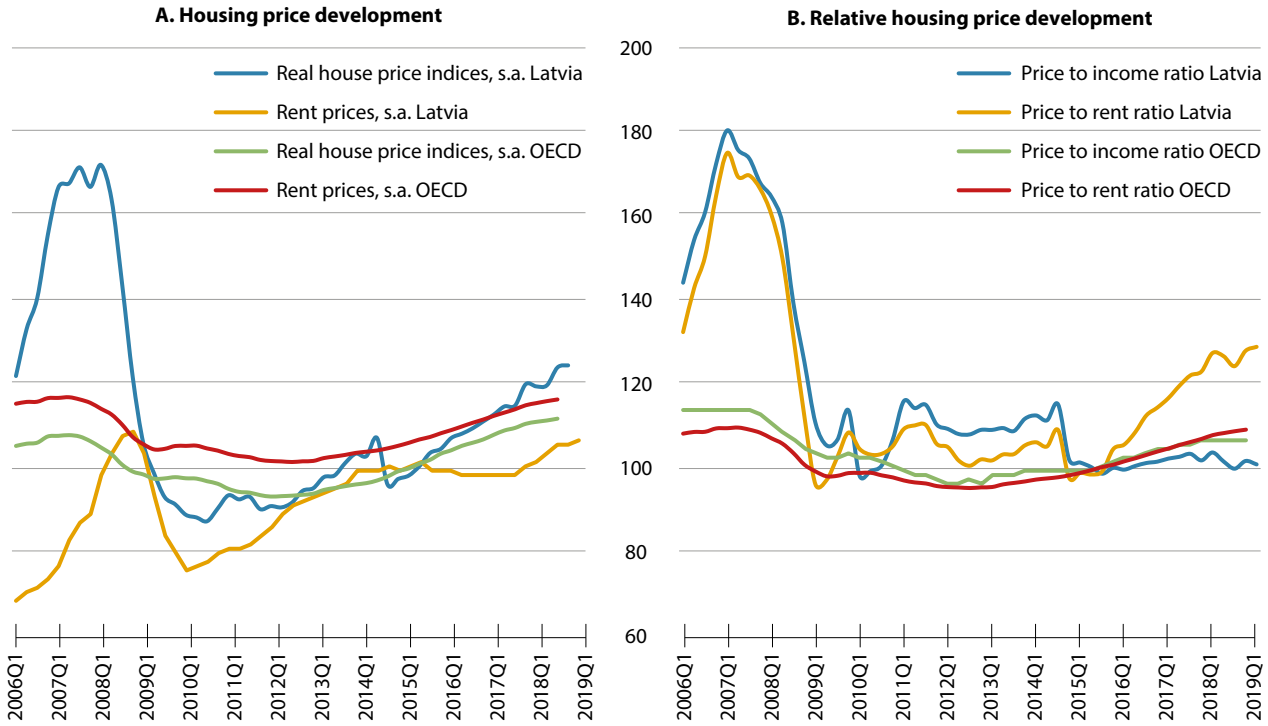
Source: Central Statistical Bureau of Latvia (CSB) (2016[3])

Prior to the global financial crisis, Latvia experienced a housing investment boom. The mortgage market began to expand – albeit slowly – as of 2000, with foreign banks from the Nordic region entering the market. Foreign currency loans became even more widespread with Latvia's accession to the European Union in 2004, which had a significant impact on the country's housing market. In the years that followed, banks relaxed their credit standards and cheap foreign loans flooded the markets. In a context of strong income growth and declining unemployment, demand for new housing increased, driven in part by the need for better housing quality, as the housing stock built in Soviet times was characterised by poor thermal and sound insulation. The credit-stimulated domestic demand created inflationary pressures, which in turn further supported credit growth as it lowered real interest rates.

However, the country experienced a considerable housing bubble, followed by a large property price fall between 2008 and 2010 (Figure 1.3, Panel A). Since 2010, house prices in Latvia have steadily increased to return to about 2006 levels. While prices have been rising faster than in many other European countries, increases have nonetheless been in line with income growth (Figure 1.3, Panel B) (OECD, 2019[4]). Price increases have been driven by strong household income growth, as well as increases in construction costs resulting from a shortage of skilled labour and increased costs of building materials (Latvijas Banka, 2019[5]).

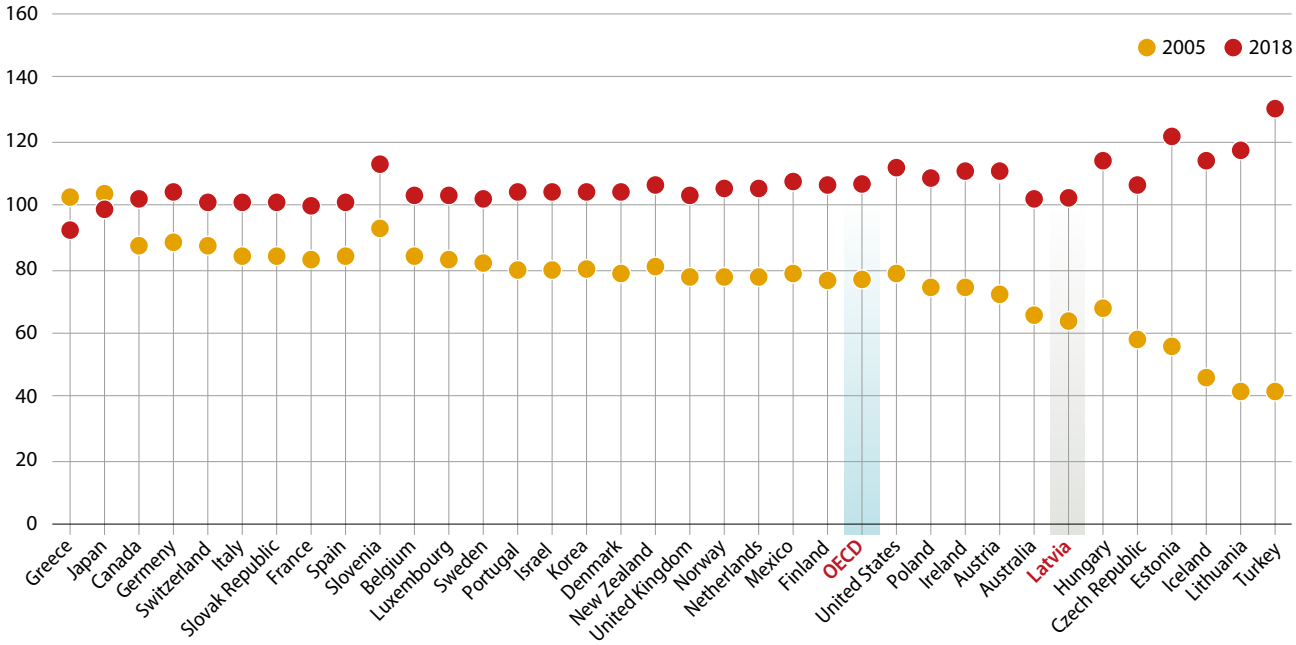
Meanwhile, real prices for rental housing have increased significantly, rising by 61% between 2005 and 2018 – one of the largest increases in the OECD (Figure 1.4). New housing construction has remained low in Latvia since the crisis. Beginning in the late 2000s, Latvia also experienced a significant out-migration, with around 276 000 people emigrating between 2008 and 2018 (Central Statistics Bureau, 2019[6]). Following a peak of emigration in 2009 and 2010, when between 35 000 and 40 000 people left the country annually, the total number of emigrants has since dropped by more than half, to pre-crisis levels (less than 16 000 people in 2018) (Figure 1.5). Around one-third of emigrants in 2018 were young adults (aged 25-34) (Central Statistics Bureau, 2019[6]).

Figure 1.3. **House and rental prices have been increasing in Latvia**
Index, 2015=100



Source: OECD House Price Database.

Figure 1.4. **Rental prices increased by 61% in Latvia between 2005 and 2018**
Rent price index, OECD countries, 2005 and 2018, 2015=100

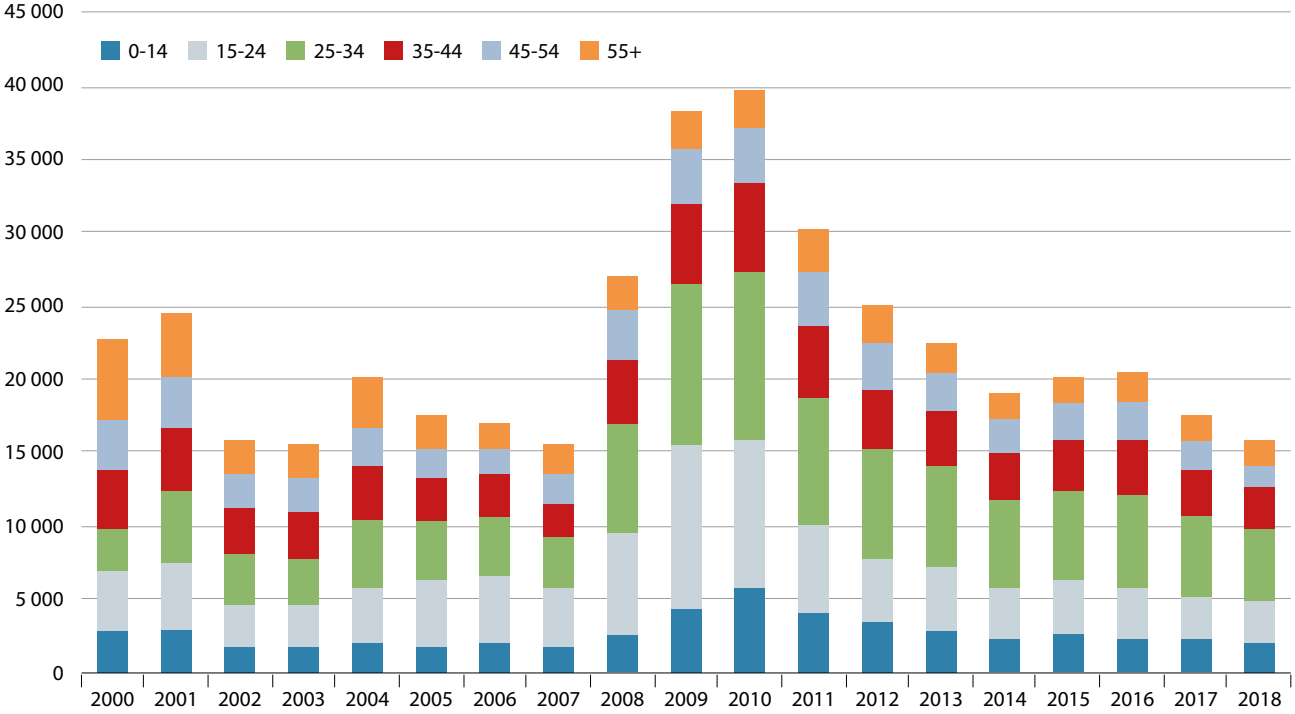


Note: 2005 data were not available in several countries; as such, data for the nearest available year were used: Norway (2008), Portugal (2010), Switzerland (2007), Germany (2007) and Greece (2010).

Source: OECD Affordable Housing Database, Indicator HM1.2. Calculations based on OECD Housing prices (indicator), https://dx.doi.org/10.1787/63008438-en (accessed 20 September 2019).

Figure 1.5. **Latvia's out-migration has returned to pre-crisis levels**

Emigrants by age group, Latvia, 2000-2018

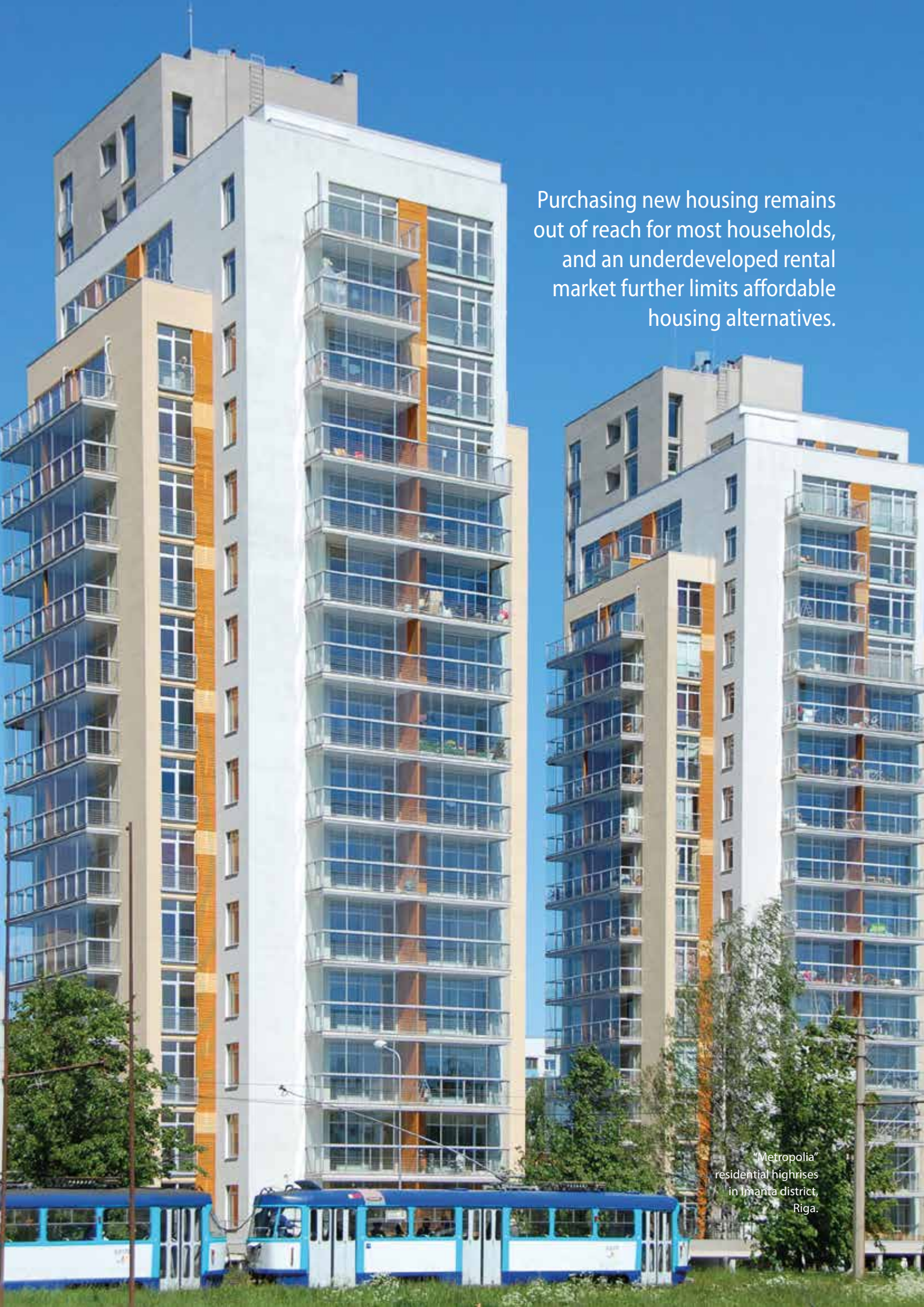


Source: Central Statistical Bureau Table IBG040, http://data1.csb.gov.lv/pxweb/en/iedz/iedz__migr/?tablelist=true

IMPLICATIONS OF PAST HOUSING MARKET DEVELOPMENTS ON CURRENT HOUSING AFFORDABILITY AND QUALITY

Latvia's housing market has been shaped by these past developments, with important implications for housing affordability and quality. The mass privatisation of the housing market enabled sitting tenants to purchase a home at significantly below-market prices, resulting in a high rate of home ownership, including among lower-income households. Nevertheless, as will be discussed further in Section 2.2, many low-income homeowners have struggled to cover the costs associated with maintaining and improving the quality of their homes. As a consequence, large parts of the housing stock are of poor quality. New housing remains unaffordable for most households, especially – but not only – those living outside the Riga region.

At the same time, the underdeveloped rental housing supply limits affordable alternatives. In contrast to some other OECD countries where the rental market provides housing solutions for households that cannot afford to purchase a home, the small formal rental housing market in Latvia largely targets upper-income households. This trend is driven by rental regulations that have historically provided insufficient protections for landlords (see Chapter 4 and Box 4.3). In this environment, rent prices have increased in Latvia by 61% between 2005 and 2018 ((OECD, 2019[7]), Indicator HM1.2), and the price-to-rent ratio suggests that buying a dwelling is more attractive than renting. Households that do not have sufficient income to purchase housing therefore only find themselves with the option of paying high rents.



Purchasing new housing remains out of reach for most households, and an underdeveloped rental market further limits affordable housing alternatives.

"Metropolia" residential highrises in Imanta district, Riga.

2. Assessing housing affordability in Latvia

This chapter begins with an overview of different metrics and methods to assess housing affordability, as well as their advantages, limits and use. Drawing on available data, it then provides a snapshot of housing affordability and quality in Latvia, assessing housing outcomes with respect to Latvia's position relative to other OECD countries, as well as across different households and regions.

WHAT IS HOUSING AFFORDABILITY?

Measuring and assessing housing affordability is not straightforward, because the term, "housing affordability," encompasses a range of concerns around the ability of households to secure decent housing in an appropriate location for an acceptable price. At its simplest, it refers to the capacity of households to pay for a dwelling, but this quickly leads to further questions around the quality or standard of housing that is available, and at what price. Other relevant concerns can include location and neighbourhood quality, transport links, access to jobs and services, and accessibility for people with disabilities.

Measuring housing affordability

There is no international agreement on how to measure housing affordability, and no single measure fully captures the range of concerns around housing affordability. Countries and international organisations use different metrics, ranging from relatively straightforward measures such as house-price-to-income and housing-expenditure-to-income ratio measures, to more data-intensive indicators such as residual income measures that focus on the income households have left *after* paying for housing, as well as housing quality measures (Stephen Ezennia and Hoskara, 2019[8]). Each has its merits and limitations, which are summarised in Table 2.1. A more complete discussion of each of these measures is included in Annex A.

At present, Latvia has no official definition of housing affordability. The expenditure-to-income ratio is used by local banks in Latvia to assess households' eligibility for a commercial mortgage, ensuring that monthly mortgage repayments do not exceed 30% of the borrower's monthly income; the 30% threshold is common in many other countries as well. Latvia's Central Statistical Bureau (CSB) publishes some information on affordability and housing conditions more generally – including an expenditure-to-income ratio – based on data collected through the EU SILC survey, but has no specific measure of housing affordability. Eligibility for social housing and housing benefits, the two major forms of housing support for low-income and vulnerable households, is discussed in detail in Chapter 3.

This study assesses multiple dimensions of housing affordability in Latvia through a series of metrics (see the section with the snapshot of housing affordability in Latvia below). These include price-to-income and expenditure-to-income ratio measures, as well as information on housing consumption from Latvia's Household Budget Survey, and different indicators of housing quality. To a large extent, the selection of these measures is influenced by data availability. Several come from existing CSB or OECD databases, such as the OECD Analytical House Price Indicators database (http://dx.doi.org/10.1787/cbcc2905-en) and the OECD Affordable Housing Database (oe.cd/ahd). Others are based on information extracted from EU-SILC (Box 2.1).

Box 2.1: HOUSING AFFORDABILITY AND QUALITY METRICS AVAILABLE IN EU-SILC

EU-SILC provides information on household income, housing conditions such as general characteristics of dwellings, dwelling types, housing deprivation rates, as well as housing costs and their relation to a household's financial situation. It also provides data on more subjective aspects of housing affordability, such as respondents' perceived ability to meet housing costs.

However, despite the breadth of information provided, the data from EU-SILC has its limits. For example, EU-SILC does not provide much information on many of the important location-based aspects of housing quality, such as access to jobs and essential services such as health and education. Sample sizes also are also fairly small: the sample for Latvia covers about 8 000 respondents living in private households, representing less than 0.5% of the population.

As a result, a disaggregation of housing affordability measures by regions or specific socio-economic groups in order to understand which regions or social groups face the biggest affordability challenges is often not feasible due to small numbers of observation.

Table 2.1. **Selection of affordability measures in OECD countries**

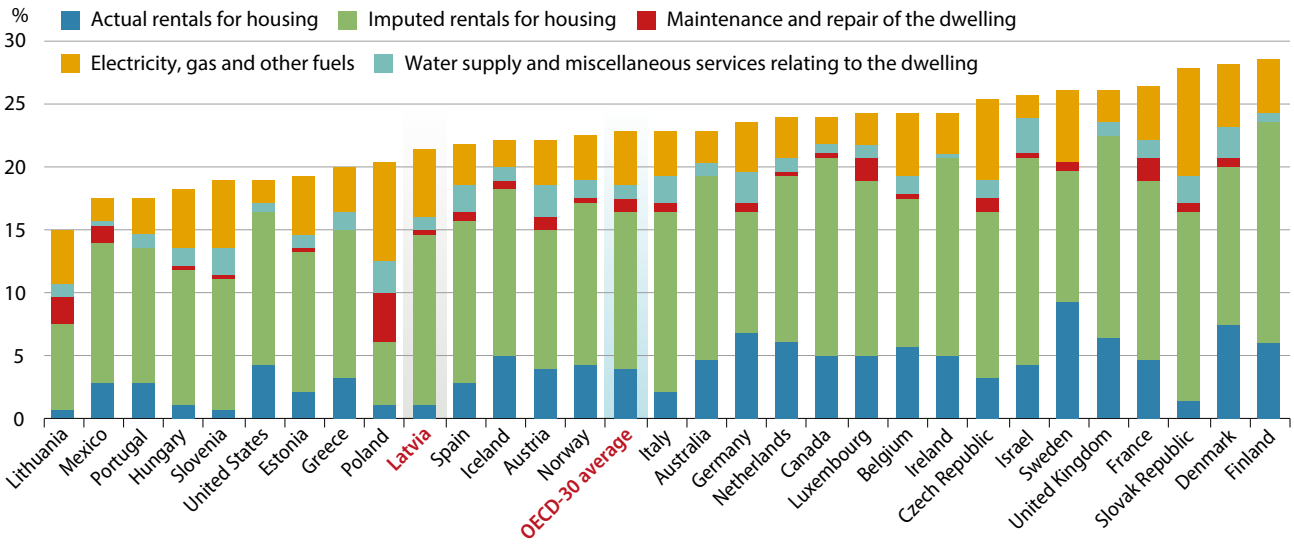
Measures to assess housing affordability in OECD countries

Type of measure	Examples of indicators	Advantages	Limits	Examples of usage
• Price-to-income ratios	• House-price-to-income ratio • Rent-price-to-income ratio	• Relatively straightforward, intuitive • Relies on data that are generally readily available in most countries • Shows, at aggregate level, how the association between prices and income varies over time and/or across markets, such as across countries	• Does not provide any indication of the distribution of housing costs and housing affordability (e.g. who has/does not have access to affordable housing) • Does not provide any indication of housing quality (e.g. what households are paying for) • Does not take into account borrowing costs	• Australia (Australian Bureau of Statistics) • Ireland (Ireland Housing Agency) • United Kingdom (Office of National Statistics) • OECD
• Housing expenditure-to-income ratios	• Housing cost burden • Housing cost overburden rate (often defined as the share of households spending more than 40% of disposable household income on housing costs)	• Relatively straightforward, intuitive • Relies on data that are generally readily available in most countries • Can be disaggregated to measure actual housing spending at household level	• "Overburden" threshold is set at an arbitrary level that remains fixed, regardless of household characteristics of their position in the income distribution • Does not provide any indication of housing quality (e.g. what households are paying for)	• Australia (Australian Bureau of Statistics) • Canada (Statistics Canada) • Ireland (Ireland Housing Agency) • The Netherlands (Statistics Netherlands) • New Zealand (Stats NZ Tatauranga Aotearoa) • Switzerland (Federal Statistical Office) • United States (Dept. Housing and Urban Development) • OECD • Eurostat • Housing Europe
• Residual income measures	• Shelter poverty • Housing-induced poverty	• Captures the level of income a household has left after paying for housing costs, to assess the extent to which households have sufficient income left for non-housing expenses after paying for housing • Can be useful to measure affordability among vulnerable low- and middle-income households	• Can require extensive additional data collection on the cost of the minimum basket of non-housing expenses • Arbitrariness with respect to what constitutes the minimum income a household needs for non-housing expenses • Does not provide any indication of housing quality (e.g. what households are paying for) • Can misdiagnose general cost-of-living problems as cost of housing problems	• New Zealand (Stats NZ Tatauranga Aotearoa) • Academic researchers
• Housing quality measures	• Rooms per person • Overcrowding rate • Housing deprivation rate	• Overcrowding rate can be assessed based on a very simple (or more complex) definition • Provides insights into a key dimension of housing affordability, e.g. what households are paying for	• There can be trade-offs between social and environmental objectives when interpreting indicators relating to dwelling size • Cross-country/cultural differences in what characteristics are most relevant to assess quality • Metrics relating to technical quality require up-to-date data on technical characteristics of dwellings, which may not be readily available in all countries	• Canada (Statistics Canada) • New Zealand (Stats NZ Tatauranga Aotearoa) • OECD • Eurostat

Source: (Rosenfeld, 2017[9]); OECD QuASH 2019; national statistical office websites; relevant national housing ministry/department/agency websites

Figure 2.1. **Spending on housing and utilities makes up about 21% of final consumption in Latvia**

Share of final household consumption expenditure spent on housing, by item, OECD countries, 2018 or latest year



Note: Data cover final consumption expenditure of households on the territory, only. Data for Australia, Greece, Mexico and Norway refer to 2017. Calculations based on data from the OECD National Accounts Database.

Source: OECD National Accounts Database, www.oecd.org/sdd/na/.

As will be discussed, typical indicators that compare housing costs to income levels are not especially revelatory in the case of Latvia, given the very large share of outright owners. In this respect, a broader range of metrics, and notably indicators of housing quality, help to paint a more comprehensive picture of some of the housing challenges facing Latvian households.

SNAPSHOT OF HOUSING AFFORDABILITY IN LATVIA

Thanks in large part to its high share of outright-owners, current housing expenditure in Latvia is low compared to many other OECD countries, and relatively few households face a high housing cost burden. However, there is a hidden side to the affordability problem in Latvia – housing spending may be low, but many people live in low-quality dwellings with housing condition problems. Spending on maintenance and repair is low, and many Latvian households struggle to afford the purchase price of a new home.

Few Latvians suffer from high housing costs, but many are stuck in poor quality housing

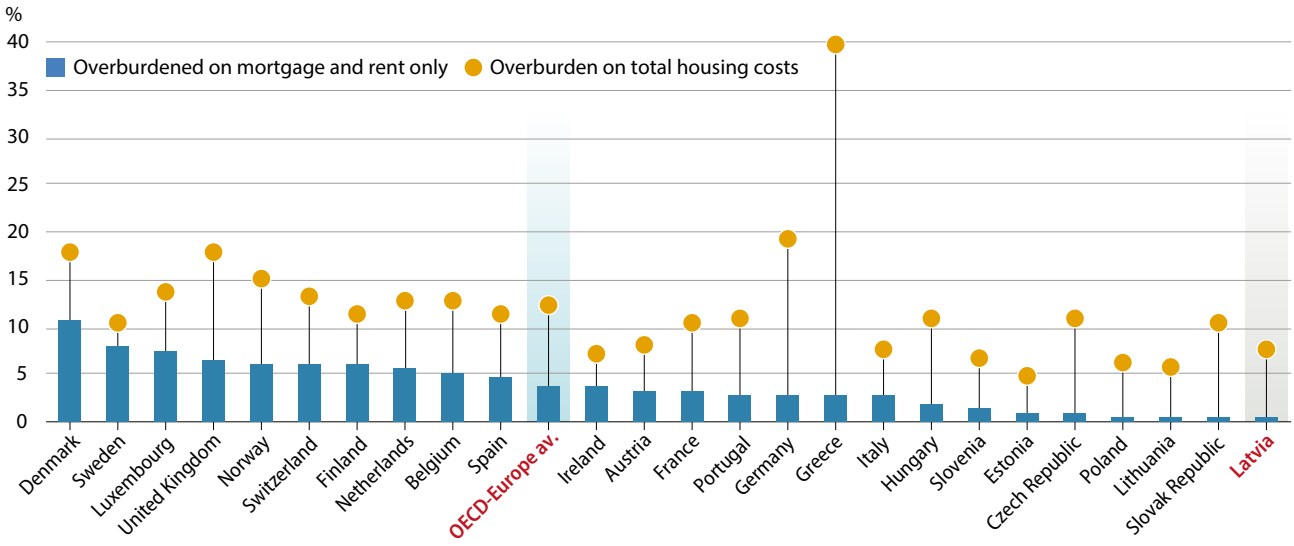
Household spending on housing is relatively low on average

Compared to many other OECD countries, average household spending on housing is relatively low in Latvia. Just over 21% of final consumption expenditure in Latvia is directed to housing, including actual and imputed rent as well as maintenance and utilities (Figure 2.1). This is lower than the OECD average (23%), and much lower than in countries like Denmark, Finland and the Slovak Republic, where about 28% of final consumption expenditure goes to housing.

In large part, Latvia's relatively low spending on housing can be explained by a small share of household expenditure going towards rents. Unsurprisingly, given the large share of outright owners and relatively small rental sector, just 1% of final household consumption in Latvia (about EUR 175 million per year) goes toward actual housing rents. This is only a quarter of the OECD average spending on actual rent as a share of final consumption (4%). Spending on imputed rents – that is, the estimated rent that owner-occupiers theoretically pay to themselves – is only slightly above the OECD average (EUR 2.4 billion per year, or 14% of final consumption in Latvia, compared to an OECD average of 13%). Notably, Latvian households also dedicate a relatively small share of spending to housing maintenance and repair (about EUR 58 million per year, or 0.4% of final consumption, compared to an OECD average of 0.8%), despite many households living in dwellings of poor quality.

Partly because of their low spending on housing, Latvians are, on average, far less likely than their counterparts in other OECD countries to be "overburdened" by housing costs – that is, to spend more than 40% of their

Figure 2.2. **Latvians are less likely to suffer housing cost overburden than people in many other OECD countries**
Share of population spending more than 40% of disposable income on mortgage and rent, and share of population spending more than 40% of disposable income on total housing costs, OECD countries, 2018



Note: "Total housing costs" refer to mortgage and rent payments, mandatory services and charges, regular maintenance and repair, taxes and the costs of utilities. "Mortgage and rent" includes both mortgage principal repayments and mortgage interest payments. Mortgage and rent payments and household disposable are all gross of (i.e. include) any housing allowances received by the household. No data on mortgage principal repayments available for Denmark due to data limitations. Data for the Slovak Republic refer to 2015, for Switzerland to 2016, and for Ireland and the United Kingdom to 2017.

Source: OECD calculations based on European Union Statistics on Income and Living Conditions (EU SILC) survey, https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions

disposable household income on housing (Figure 2.2). In 2018, approximately just 0.4% of the total Latvian population (about 7 000 people) spent more than 40% of their disposable income on mortgage or rent. This is far below the average for OECD countries in Europe (4%). The Latvian overburden rate increases once other housing expenditures (e.g. mandatory services and charges, regular maintenance and repair, taxes, and utilities) are factored in, but still remains lower than the OECD-Europe average. In 2018, about 7.5% of Latvians were overburdened on total housing costs (roughly 130 000 people), compared to an OECD-Europe average of 12%.

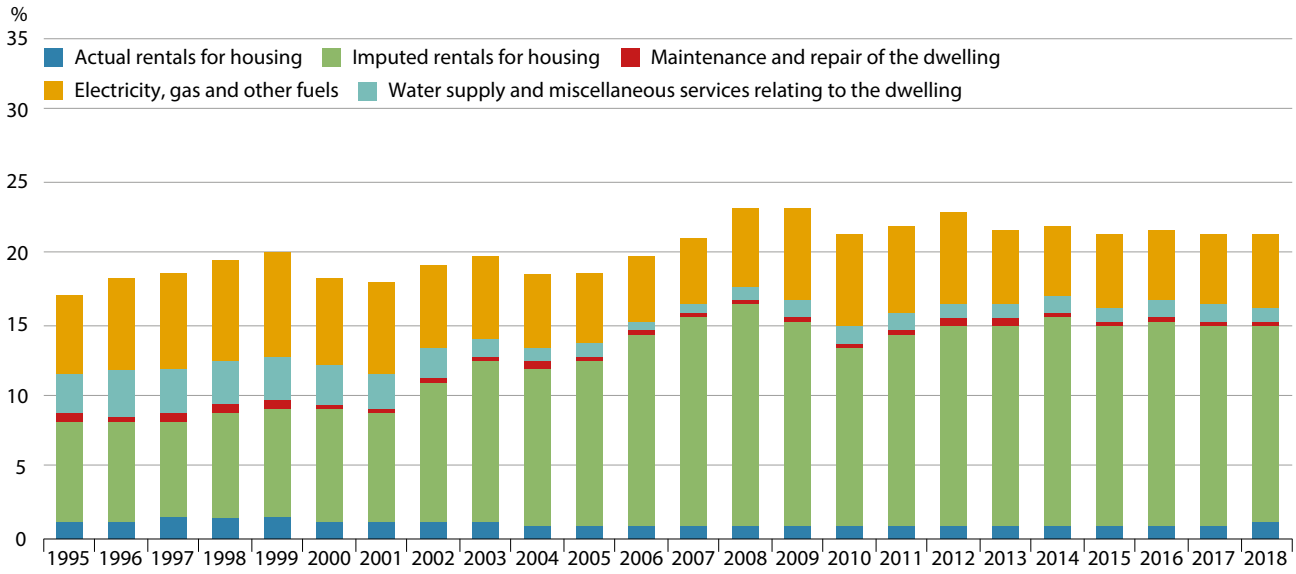
Household spending on housing is stable, and the share of Latvians facing a high housing cost burden is falling

As a share of total consumption, household spending on housing has remained relatively stable in Latvia over the past decade or so. Similar to many OECD countries (OECD, 2019[7]), housing spending grew sharply as a share of total consumption through the late 1990s and the 2000s – from 17% in 1995 to 23% in 2009 – largely on account of an increase in spending on imputed rent by owner-occupiers (Figure 2.3). However, housing spending stabilised following the decline in house prices between 2008 and 2010 (see Chapter 1), and has remained steady at around 21-22% of final household consumption since.

Over a similar period, the share of the Latvian population that is considered overburdened by housing costs has fallen considerably. Between 2012 and 2018, the mortgage-and-rent overburden rate fell from 1.8% to 0.4%, and the total housing cost overburden rate from 11.5% to 7.5% -- a drop of more than one-third. Latvia has also seen a decline in the share of the population reporting falling into arrears or mortgage and rent payments (from 5% in 2013 to 3.7% in 2018), and on utility bills (from 11.1% in 2013 to 7.7% in 2018) (Eurostat, 2020[10]; Eurostat, 2020[11]). The share of the population reporting that housing costs are a "heavy" financial burden has fallen too, from 32% in 2013 to 24% in 2018 (Eurostat, 2020[12]).

Strong income growth is likely to be one reason for the decline in the share of the Latvian population experiencing housing cost difficulties. Between 2010 (the post-crisis low point) and 2016, the top cut-off point for the first decile of the Latvian income distribution grew from about EUR 2 300 to roughly EUR 3 100. Incomes higher up the income distribution grew by more, both in relative and in absolute terms. Nonetheless, this represents an increase in disposable income of more than 30% for those at the bottom end of the distribution (Figure 2.4). In addition, cuts in interest rates have helped indebted households, as most mortgages are at variable rates.

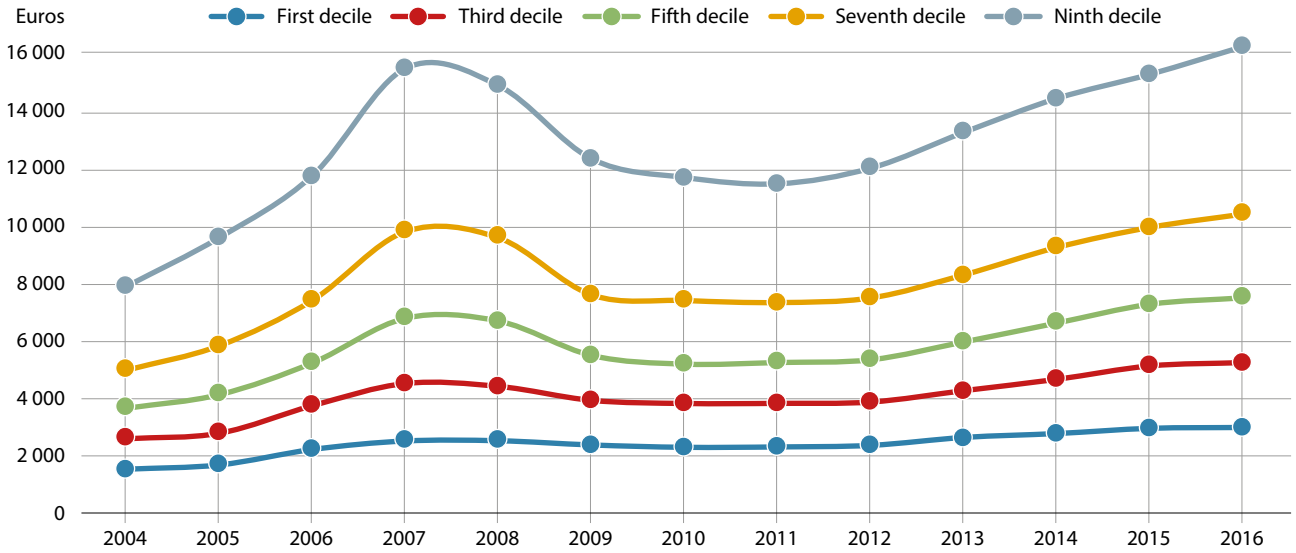
Figure 2.3. **Relative household spending on housing has stabilised over the past decade**
Share of final household consumption expenditure spent on housing, by item, Latvia, 1995-2018



Note: Real (2015) Euros, in/deflated using CPI

Source: OECD Income Distribution Database, www.oecd.org/social/income-distribution-database.htm

Figure 2.4. **Even for those at the bottom end of the income distribution, real incomes in Latvia have grown by more than 50% since the early 2010s**
Top cut-off points for equivalised household disposable income deciles, Latvia, Euros (2015), 2004-2016



Note: Real (2015) Euros, in/deflated using CPI

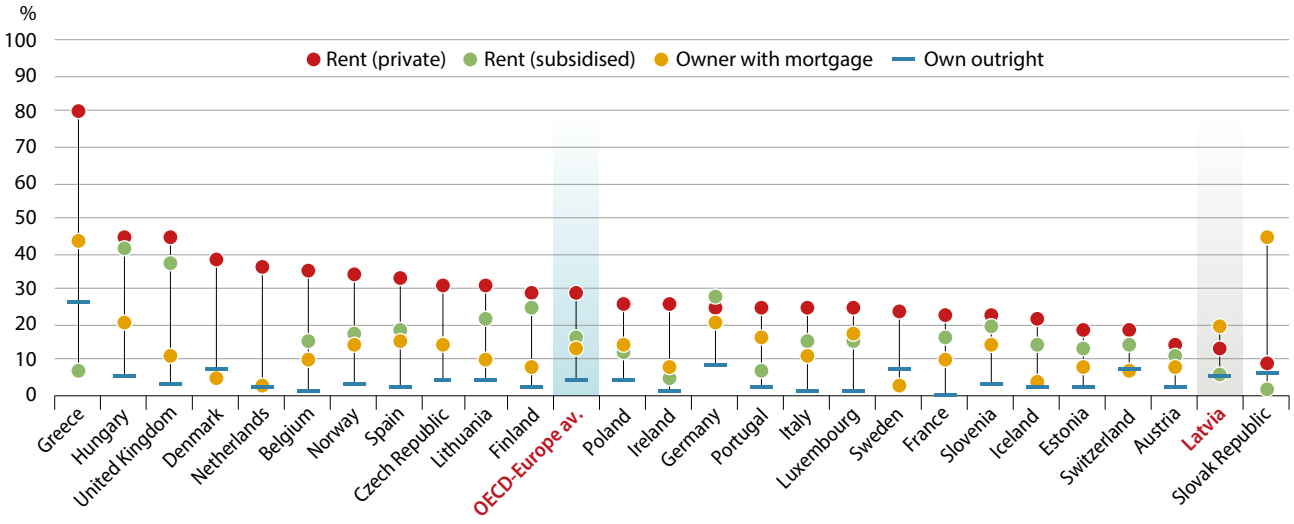
Source: OECD Income Distribution Database, www.oecd.org/social/income-distribution-database.htm

Renters and owners paying a mortgage are more likely to be overburdened with housing costs

Households paying off a mortgage and those in the private rental market are most likely to be overburdened by housing costs (Figure 2.5). Across all tenure types in Latvia, owners paying a mortgage have the highest housing overburden rate, registering at 20% in 2018. This is considerably higher than the OECD-Europe average for owner-with-mortgage households (14%). While owner-with-mortgage households are a comparatively small group in Latvia – representing only 9% of households (see Figure 1.1) – this is illustrative of the difficulties

Figure 2.5. **Renters and owners paying a mortgage are the most likely groups in Latvia to face a higher housing cost burden**

Share of population spending more than 40% of disposable income on total housing costs, by tenure, OECD countries, 2018



Note: "Total housing costs" refer to mortgage and rent payments, mandatory services and charges, regular maintenance and repair, taxes and the costs of utilities. "Mortgage and rent" includes both mortgage principal repayments and mortgage interest payments. Mortgage and rent payments and household disposable are all gross of (i.e. include) any housing allowances received by the household. "Low income" refers to individuals in the bottom fifth (first quintile) of the income distribution, "Middle income" to individuals in households in the middle fifth (third decile) of the income distribution, and "High income" to individuals in households in the top fifth (fifth quintile) of the income distribution. No data on mortgage principal repayments available for Denmark due to data limitations. Data for the Slovak Republic refer to 2015, for Iceland and Switzerland to 2016, and for Ireland and the United Kingdom to 2017.

Source: OECD calculations based on European Union Statistics on Income and Living Conditions (EU SILC) survey, https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions

many Latvian households have in purchasing a new home (see later in this chapter), as well as the legacy of the mid-2000s boom. Further, about 12% of the Latvian population in privately rented dwellings are overburdened by total housing costs, compared to 2% of the population in subsidised rentals, and 5% of the population in dwellings that are owned outright. While Latvian renters in the private market are more likely to be overburdened than renters in subsidised housing and outright owners, the overburden rate for private renters in Latvia remains less than half of the OECD-Europe average of 28%.

Purchasing a home remains out of reach for many Latvian households, especially those outside the Riga region

In addition to the higher overburden rate among owners with a mortgage, many Latvian households are credit-constrained and struggle to afford a mortgage to purchase a home.

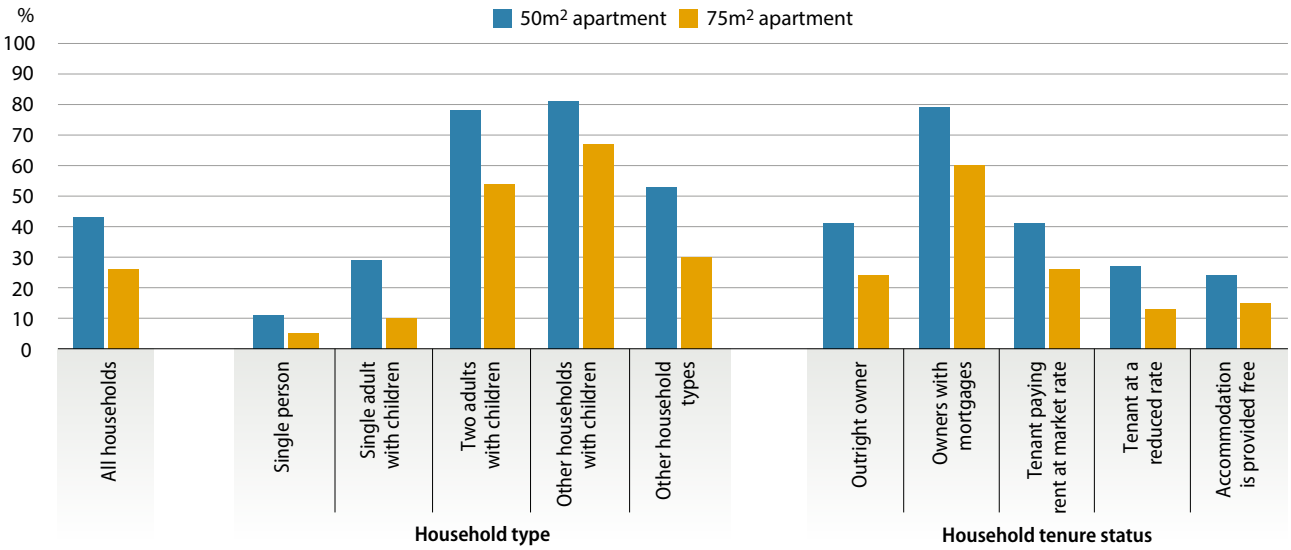
Figure 2.6 illustrates the scale of the challenge across different household types and tenures. Based on current (2018) income levels across households and the average transaction price for an existing apartment in Riga (EUR 900/m^2), the findings illustrate the estimated share of Latvia households that could afford a mortgage on either a 50m^2 apartment (roughly the average size for a two-room apartment) and a 75m^2 apartment (the average for a three-room apartment) without spending more than 30% of disposable income on housing costs. Indeed, 30% is a common threshold for an acceptable share of household income to be dedicated towards housing (Gabriel et al., 2005[13]), and a threshold used by several commercial lenders in Latvia to assess mortgage affordability (SEB, 2019[14]).

The results of this affordability simulation suggest:

- Using the average transaction price for an existing apartment in Riga (EUR 900/m^2), 2019 average annual interest rates (2.9%), and utilities and maintenance charges that are assumed to cost EUR 2.5 per m^2 per month, a household would need an annual disposable income of at least EUR 11 400 to be able to afford the mortgage on a 50m^2 apartment without spending more than 30% of disposable income on total housing costs. Fewer than half (43%) of all households have an annual disposable income of EUR 11 400 or more. For a 75m^2 apartment, the household would need an annual disposable income of at least EUR 17 100. Only 27% of households have an income this high.

Figure 2.6. **Fewer than half of Latvian households can afford a mortgage on the average 50m² apartment, and close to only a quarter on the average 75m² apartment**

Estimated share of households that could afford a mortgage on an apartment without spending more than 30% of household disposable income on total housing costs, by apartment size, based on the average transaction price in Riga, Latvia, 2018



Note: "Could afford a mortgage" means that total housing costs (including utilities and maintenance) would consume less than 30% of total after-transfer household disposable income. Estimates based on the average transaction price for apartments in Riga (EUR 900 per m²). Annual mortgage costs estimated on the basis of a 30-year repayment mortgage with monthly payments. The interest rate is set at the 2019 average annual percentage rate of charge on loans to households (new business) for house purchase, as published by the Bank of Latvia (2.9%). This rate is assumed to remain fixed throughout the lifetime of the mortgage. Utilities and maintenance charges are assumed to cost EUR 2.5 per m² per month. It is assumed that the household already has access to a deposit worth 15% of the transaction price. For the breakdown by household types, "children" are defined as household members aged 17 or less, or household members aged between 18 and 24 that are economically inactive and living with at least one parent. Household disposable incomes are OECD estimates based on information from the European Union Statistics on Income and Living Conditions (EU SILC) survey 2018. See Annex C for a simulation that incorporates a residual income test, set at EUR 300 per person, per month, after mortgage costs, as an additional criteria to assess affordability.

Source: OECD estimates based on the European Union Statistics on Income and Living Conditions (EU SILC) survey, Latio Residential Report: 1st Half of 2019 (http://latio.lv/en/services/market-analysis-and-review-1/housing-market), and Bank of Latvia Interest Rate Statistics (www.bank.lv/en/statistics/stat-data/interest-rate-statistics).

- Disaggregating by household type, single-person households and single-parent households are the least likely to be able to afford a mortgage on an apartment of either size. Only 5% of single-person households, and 10% of single-parent households, could afford a mortgage on a 75m² apartment. Families with two or more adults are the most likely to be able to afford a mortgage, reflecting the higher incomes often enjoyed by two-adult families in Latvia, even after adjusting for household size (Table 2.2). Still, almost half of two-adult-with-children households would not be able to afford the mortgage on a 75m² apartment without spending more than 30% of disposable income on total housing costs.

- Many outright owner households, and many households living in subsidised or free accommodation, would struggle to afford a mortgage on either a 50m² or 75m² apartment. This is relevant for owner households who may wish to move, either to a better quality dwelling or a dwelling that is located in an area with better job opportunities.

These results refer only to the affordability of mortgages, and not to whether or not households can actually access a mortgage. Commercial lenders use a variety of criteria to assess mortgage applications, including housing-cost-to-income ratios but also potentially, criteria such as the applicant's employment status, age, credit history, and the income remaining per person after mortgage costs (often referred to as the per person "residual income"). Figure A C.1 in Annex C illustrates the impact of the inclusion of one of these criteria on affordability – a per person residual income test, set at EUR 300 per person, per month, after mortgage costs. Overall, inclusion of the residual income test makes little difference to the share of Latvian households that could potentially afford a mortgage. To give one example, the share of households that could afford a mortgage on a 75m² apartment falls by only 1.3 percentage points once the residual income test is included (Figure A C.1). However, the inclusion of a residual income test moderately reduces the share of families with children that can afford a mortgage, particularly on the smaller 50m² apartment, in large part because families with children tend to have a greater number of household members.

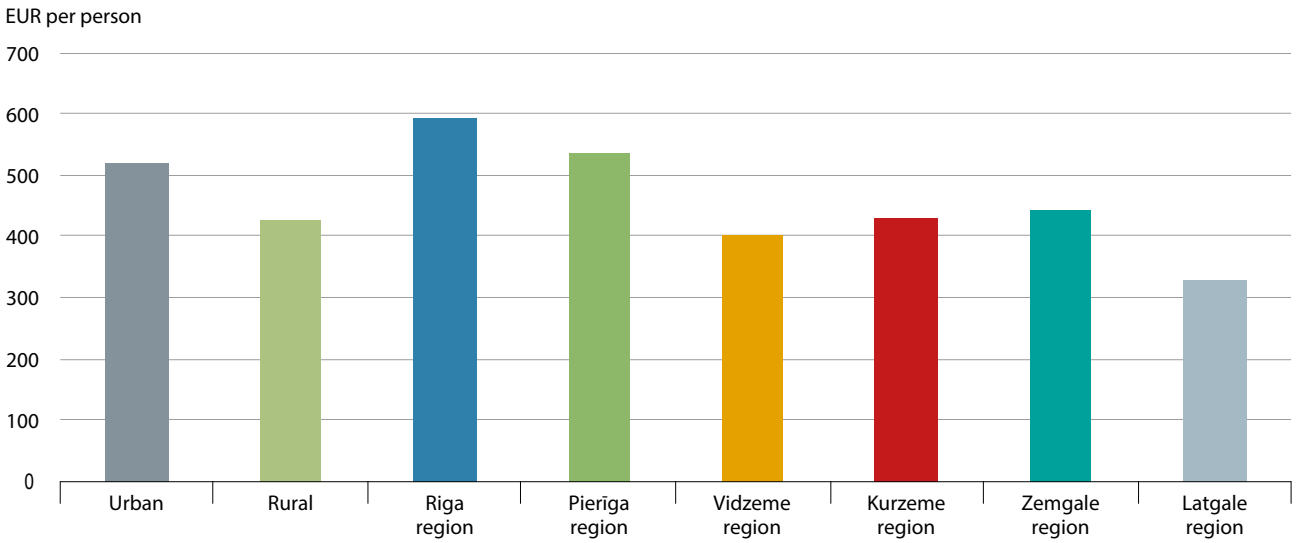
Table 2.2. **Frequency and average incomes of different household types**
Distribution of households by household types, and mean before-transfer household disposable income, after-transfer household disposable income, and equivalised after-transfer household disposable income, by household type, Latvia, 2018

Household type	Share of households	Mean before-transfer household disposable income	Mean after-transfer household disposable income	Mean equivalised after-transfer household disposable income
	%	EUR	EUR	EUR
Single person household	36.2	6 051.8	6 384.1	6 384.1
Two adults, no children, both under 65	14.3	15 083.5	15 963.5	11 287.9
Two adults, no children, at least one 65+	13.1	9 505.5	9 895.8	6 997.4
Other households without children	7.8	15 27.6	20 467.2	11 281.4
Single parent, at least one child	4.9	8 321.7	9 769.6	6 358.7
Two adults, one child	8.8	17 853.5	19 722.5	11 386.8
Two adults, two children	7.0	19 455.5	21 646.1	10 823.1
Two adults, three or more children	2.1	21 303.9	25 360.1	11 153.3
Other households with children	5.3	20 939.8	22 926.8	10 452.6
Other	0.5	18 415.7	19 710.2	10 711.0

Note: For equivalised after-transfer household disposable income, incomes are equivalised using the square root scale

Source: OECD estimates based on the European Union Statistics on Income and Living Conditions (EU SILC) survey

Figure 2.7. The average income in Riga is about 80% higher than in the poorest region, Latgale
Disposable income per person, by region, Latvia, 2018



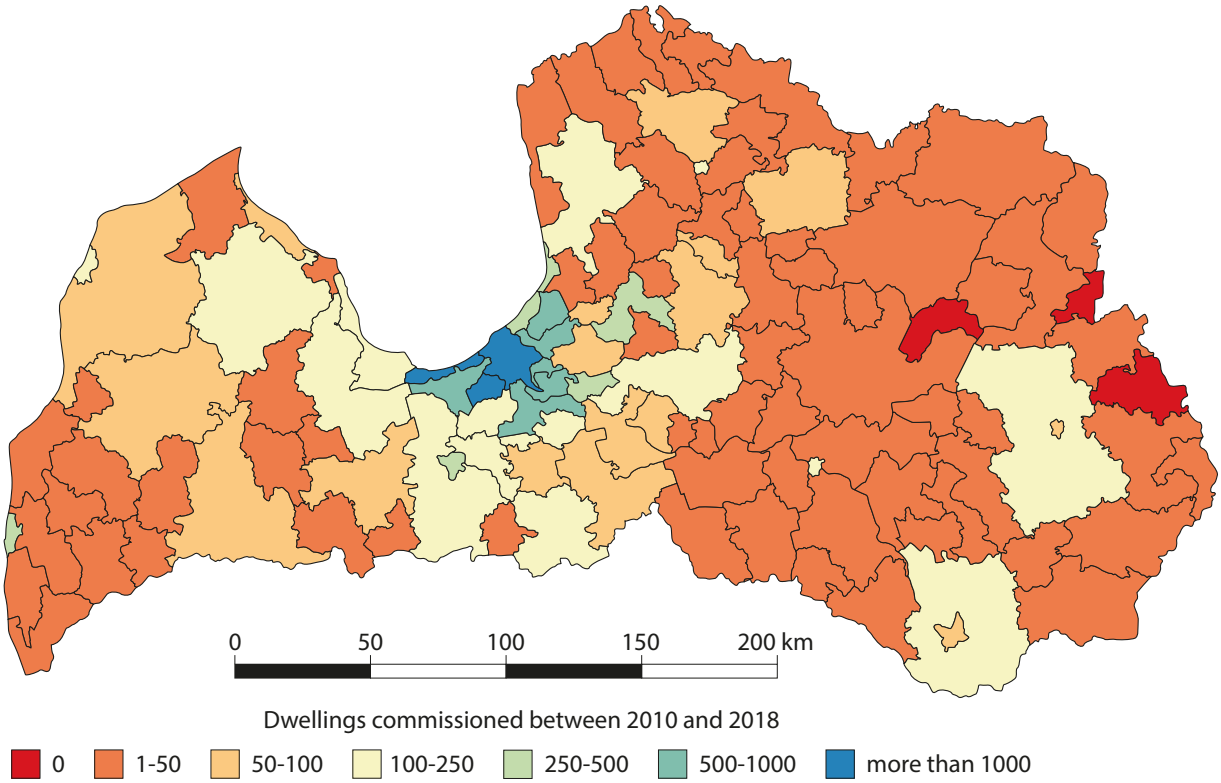
Note: Disposable income refers to total disposable income after taxes and transfers per person.

Source: CSB, table MNG 160

Households living outside the capital region of Riga, the economic centre of the country, face particular challenges to afford a mortgage, which may contribute to spatial inequalities with respect to economic performance and income growth. As shown in Figure 2.7, incomes are highest in Riga and the surrounding Pieriga region, where average disposable monthly income per person stands at EUR 592 and EUR 536, respectively. Average income are much lower in Kurzeme, Vidzeme, and Zemgale (around EUR 400 - EUR 440), and especially in the Latgale region (EUR 330).

These spatial differences in purchasing power among households translate into house price differences across regions. As the formal rental market is underdeveloped and mainly concentrated in the Riga region, a regional

Figure 2.8. **New dwellings commissioned in Latvia, by region**
New residential construction, total between 2010 and 2018



Note: Data on residential buildings commissioned, number of dwellings are used to estimate construction output in administrative territories of Latvia.

Source: CSB data

assessment of house prices can be based only on housing transactions. Still, most housing transactions take place in Riga and the surrounding region; transaction information outside the Riga region is based on only a few observations and therefore regional disaggregation of house prices must be interpreted with caution. In terms of new construction, only about 2 650 new dwellings were built per year between 2010 and 2018, with the vast majority of new construction concentrated in and around Riga (Figure 2.8). Most commercial banks concentrate their lending in the Riga region, making it difficult for households living outside Riga to qualify for a mortgage.

In 2018, the average price of an apartment in Riga was around EUR 900 per square meter (Latio, 2019[15]); this estimate is largely based on transactions of Soviet-era apartments built outside the city centre, which are cheaper and generally of lower quality than newly constructed dwellings. Newly developed projects and renovated apartments outside the city centre can reach up to EUR 1500 per square meter (Swedbank, 2019[16]; Latio, 2019[17]). House prices in regions outside Riga and Pieriga were significantly lower, at less than EUR 500 per square meter. However, in addition to the low number of transactions in these regions, new housing construction is very limited, meaning that prices might reflect transactions of older housing units of lower quality.

Purchasing an adequate dwelling remains a challenge for households earning the average regional wage, even in regions with a comparably low average price per square meter (Table 2.3). Maximum loan estimates provided by an online loan calculator by Swedbank, a major commercial lender in Latvia, offer a sketch of what is available to potential home buyers across Latvia's regions. Note that these are simulations based on the cases available with the Swedbank mortgage loan calculator, and do *not* imply that such households would actually *receive* a commercial mortgage from the bank.

Assuming households earn the average region wage, single-earner households with one or no dependents would be able to access a mortgage for a dwelling within the range of 27 square meters (Riga, new or renovated apartment) to 58 square meters (Kurzeme).

By contrast, single-earner households with more than one dependent would struggle to purchase a reasonably sized dwelling in any region: in Riga, they could afford at best an 18-square meter apartment. While the situation is slightly better for dual-earner households, the size of an *affordable* apartment (less than 40 square meters) remains nevertheless small in Riga for a household of at least two people. In Latgale, the average wage would not suffice to be eligible for a commercial loan for either single- or dual-earner households. Banks might use additional criteria to assess mortgage applications, which could potentially include detail on household size and composition, education type, employment contract type, credit history, etc. Information on these "additional" criteria was available and has not been included in the simulation.

Table 2.3. **Simulation of maximum dwelling size available for purchase across Latvian regions**
Number of square metres of commercially-financed credit available, by region and household type, 2018

Panel A. Single-earner households

Region	Average transaction price EUR/m²	Average net monthly wage (EUR)	Single-earner household, on the average net monthly regional wage					
			With one dependent or less			With more than one dependent		
			Eligible for loan	Maximum loan available (EUR)	Maximum m² available	Eligible for loan	Maximum loan available (EUR)	Maximum m² available
Riga (new development or renovated apartment)	1 500	829	yes	34 362	27	yes	13 745	11
Riga (existing, non-renovated apartment)	900	829	yes	34 362	45	yes	13 745	18
Pieriga	980	705	yes	29 222	35	no	–	–
Zemgale	475	634	yes	21 023	52	no	–	–
Vidzeme	450	604	yes	20 028	52	no	–	–
Kurzeme	433	641	yes	21 255	58	no	–	–
Latgale	400	529	no	–	–	no	–	–

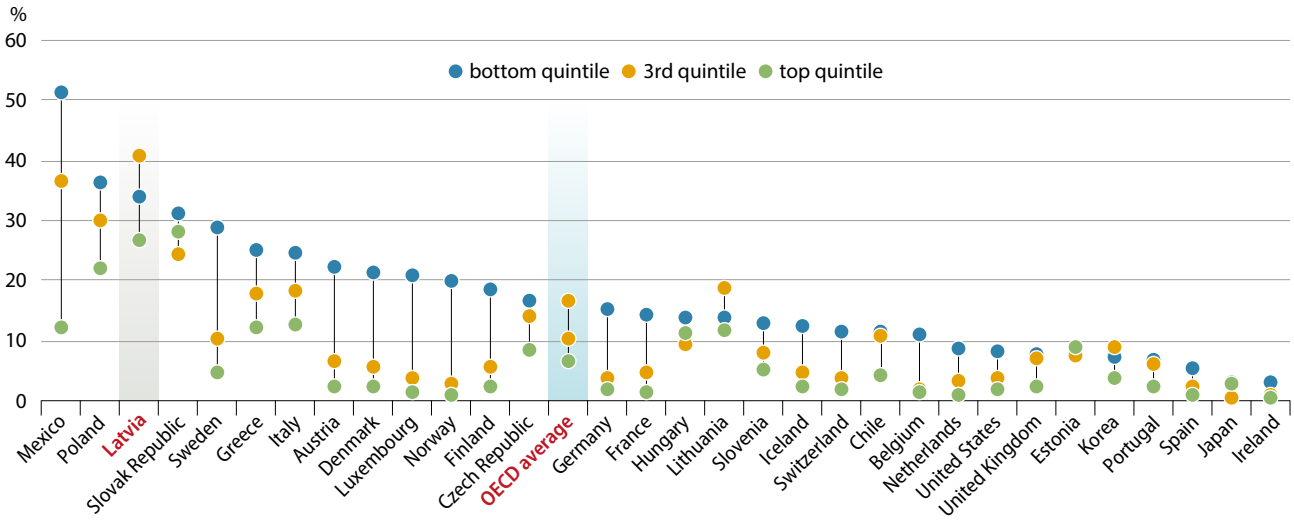
Panel B. Two-earner households

Region	Average transaction price EUR/m²	Average net monthly wage (EUR)	Two-earner household, on 1.5 * the average net monthly regional wage					
			With one dependent or less			With more than one dependent		
			Eligible for loan	Maximum loan available (EUR)	Maximum m² available	Eligible for loan	Maximum loan available (EUR)	Maximum m² available
Riga (new development or renovated apartment)	1 500	829	yes	51 542	40	yes	51 542	40
Riga (apartment)	900	829	yes	51 542	67	yes	51 542	67
Pieriga	980	705	yes	43 833	53	yes	43 833	53
Zemgale	475	634	yes	31 535	78	yes	31 535	78
Vidzeme	450	604	yes	15 021	39	yes	15 021	39
Kurzeme	433	641	yes	31 883	87	yes	31 883	87
Latgale	400	529	no	–	–	no	–	–

Note: "Maximum loan available" is based on information provided by the Swedbank mortgage loan calculator as of 28 February 2020. The "maximum m² available" is calculated based on the maximum loan available and average regional transaction price per m², assuming the household already has access to a deposit worth 15% of the transaction price. The duration of the mortgage is set at 30 years. The interest rate used by Swedbank consists of the six-month Euribor plus individual interest margin. To be eligible for a mortgage of any size with Swedbank, household net income has to be at least 600 EUR per month after taxes for a household with one dependent or less, or at least 800 EUR per month for households with more than one dependent or those applying with a co-borrower (a more detailed breakdown of household types is not possible with the Swedbank mortgage loan calculator tool). It is assumed that the household's only source of income is market earnings at the average regional monthly wage. For two-earner households, income is calculated as 1.5 times the average net monthly regional wage, as it is assumed that not all workers work full-time, and not all workers earn the average wage.

Source: OECD estimates based on CSB table DSG050: Average monthly wages and salaries by statistical region (www.csb.gov.lv/en/sakums), Latio Residential Report: 1st Half of 2019 (http://latio.lv/en/services/market-analysis-and-review-1/housing-market), and the Swedbank mortgage loan calculator (www.swedbank.lv/private/credit/loans/home).

Figure 2.9. **Latvia records some of the highest overcrowding rates in the OECD**
Share of overcrowded households, by quintiles of the income distribution, in percent, 2018 or latest year available



Note: 1. For Chile, Mexico, Denmark, the Netherlands and the United States, there is no information on subsidised tenants due to data limitations. 2. See section "Data and comparability issues" of Indicator HC2.1 in (OECD, 2019[7]) on the limits to comparability across countries due to the definition of rooms. 3. Low-income households are households in the bottom quintile of the (net) income distribution. In Chile, Mexico, Korea and the United States gross income is used due to data limitations. 4. Data for Japan only available on the respondent level due to data limitations. Results therefore refer to the population, rather than to households. 5. Data for Canada are adjusted by Statistics Canada based on the assumption of the presence of a kitchen in dwellings where it is expected. Income quintiles for Canada are based on adjusted after-tax household income. 6. OECD unweighted average.

Source: (OECD, 2019[7]). OECD calculations based on European Union Statistics on Income and Living Conditions (EU SILC) survey 2018 except for Ireland and the Slovak Republic (2017), and Iceland and the United Kingdom (2016); calculations from Statistics Canada based on the 2016 Canada Census of Population for Canada; Encuesta de Caracterización Socioeconómica Nacional (CASEN) for Chile (2013); the German Socioeconomic Panel (GSOEP) for Germany (2014); the Korean Housing Survey (2017); the Japan Household Panel Study (JHPS) for Japan (2016); Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH) for Mexico (2016); and the American Community Survey (ACS) for the United States (2016).

Many Latvian households face a housing quality challenge

Many Latvian households face housing quality problems, including many outright owners. Housing quality deficiencies are indicative of a broader housing affordability challenge, in that many households live in dwellings of poor quality because they cannot afford regular maintenance or improvements to their dwellings, or because they cannot afford to move to a higher quality dwelling. Further, while a number of measures to assess housing quality are available for Latvia, important data gaps in housing quality remain, namely related to the size, age and many of the technical conditions of the housing stock.

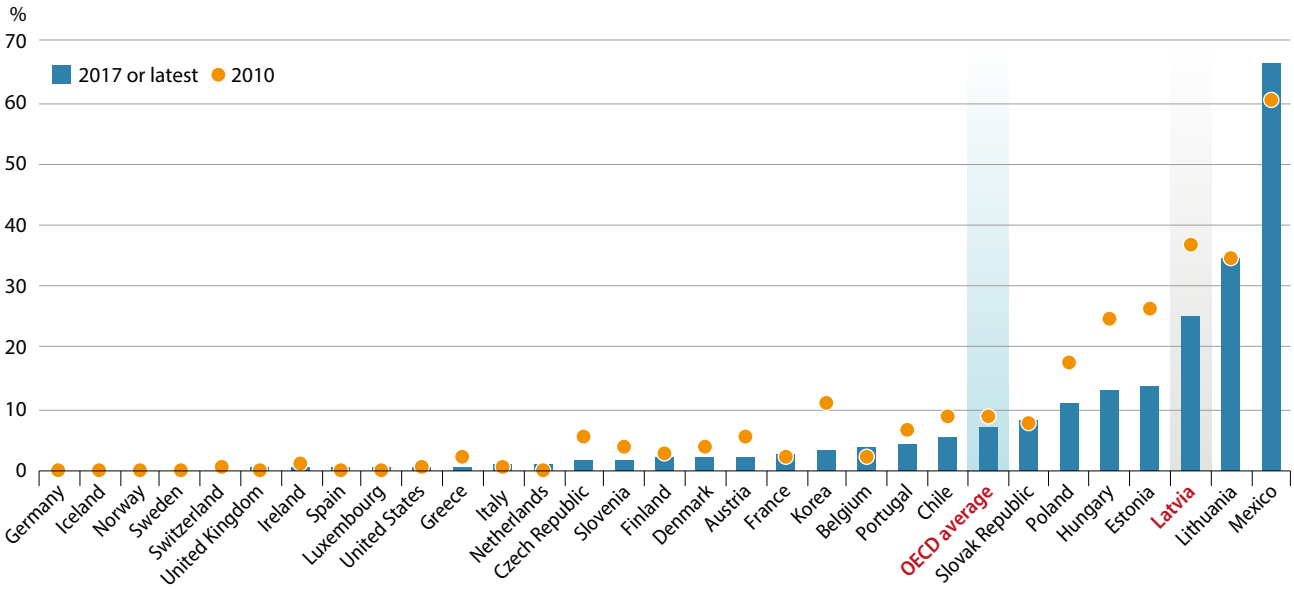
More than a third of Latvians live in overcrowded housing conditions

More than a third (34%) of Latvian households live in overcrowded housing. This is the highest overall share in the OECD, followed very closely by Mexico (34%) and Poland (31%), and is over three times higher than the OECD average overcrowding rate 11% ((OECD, 2019[7]), Indicator HC2.1). Overcrowding – which measures the number of rooms per household member, taking into account household composition – is not restricted to low-income households (Figure 2.9). More than 40% of Latvian middle-income households (those in the third quintile of the income distribution) are overcrowded, compared to an OECD average of around 10%. Meanwhile, over one-third of households in the bottom quintile live in overcrowded conditions, compared to an OECD average of around 16%. Latvia also records the second highest rate of overcrowding among high-income households (the top income quintile), with almost 27% of households in the top income quintile living in overcrowded conditions, just below the Slovak Republic (28%) and compared to an OECD average of around 6%.

Households across the income distribution face housing quality deficiencies

Latvian households are more likely to live in housing that lacks basic facilities (defined as the absence of an indoor flushing toilet for the sole use of the household), relative to the OECD and EU average (Figure 2.10). Around a quarter of poor households (living below 50% of the median equivalised disposable income) live in dwellings without basic facilities, compared to an OECD average of less than 7% and an EU average of less than 6% (OECD, 2019[7]). Housing quality is especially a challenge for low-income households: over a quarter of poor Latvian households (defined as those below 50%

Figure 2.10. **A quarter of low-income Latvian households live in housing without basic facilities**
Share of poor households (below 50% of median equivalised disposable income) without exclusive use of indoor flushing toilet, in percent, 2010 and 2017 or latest available year



Note: 1. No estimates available for Australia, Canada, Japan, New Zealand and Turkey due to data limitations. 2. Poor households are households with equivalised disposable income below 50% of the median country income. In Chile, Mexico, Korea, and the United States gross income is used due to data limitations. 3. Results only shown if category composed of at least 30 observations. 4. 2010 data were not available in several countries; as such, data for the nearest available year were used: Chile (2011), Denmark (2011), and Germany (2015).

Source: (OECD, 2019[7]). OECD calculations based on European Survey on Income and Living Conditions (EU SILC); Encuesta de Caracterización Socioeconómica Nacional (CASEN) for Chile (2017); the Korean Housing Survey (2017); Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH) for Mexico (2016); American Community Survey (ACS) for the United States (2015).

of median equivalised disposable income) lacked basic sanitation facilities in 2017, the third-highest share in the OECD, following Mexico (66%) and Lithuania (34%). In the case of Latvia, this nevertheless represents a marked improvement since 2010, when nearly 37% of poor households lacked basic facilities.

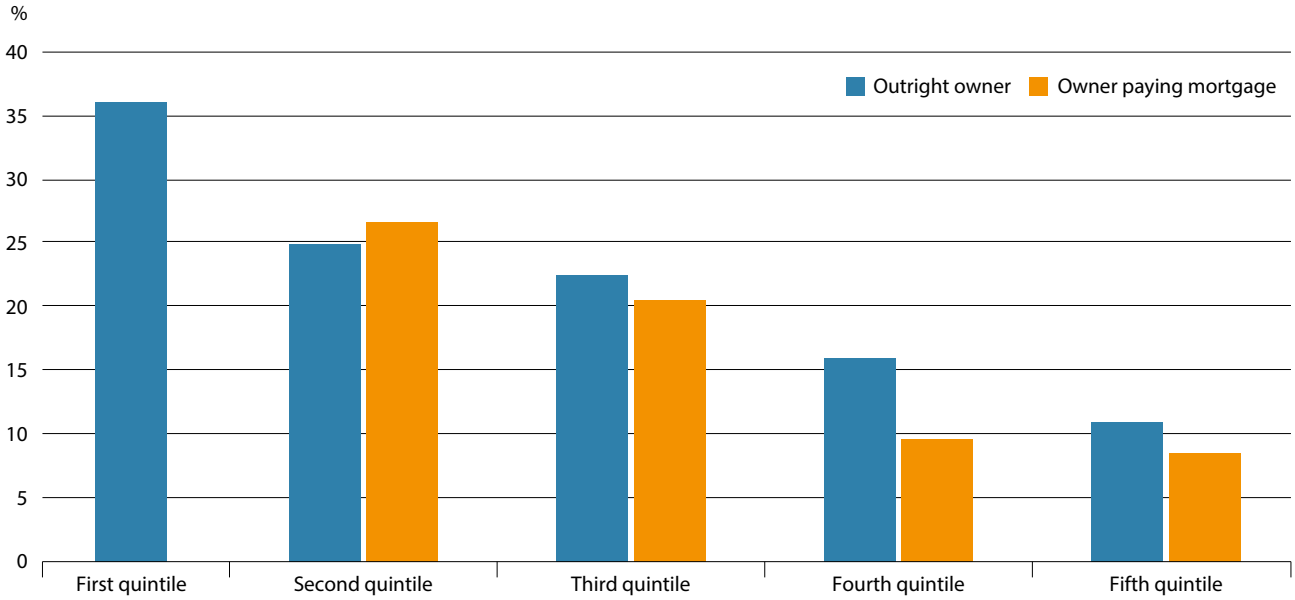
Housing quality deficiencies are a challenge for many homeowners. For example, more than 35% of outright owners in the bottom quintile of the income distribution report that their dwelling has a leaking roof, damp walls, floors or foundation, or rot in window frames and floor (Figure 2.11). While this share falls with income, even in the third quintile (people in the middle of the income distribution), more than 20% of people live in substandard housing. Further, 11% of households in the bottom quintile of the income distribution and 4% of middle-income households face *severe* housing deprivation, defined as living in a dwelling with overcrowded conditions in addition to other housing quality deficiencies.[1] This is the second-highest share in the OECD, though well behind Mexico (Figure 2.12, Panel A). The vast majority of low-income households facing severe housing deprivation in Latvia live in dwellings that are owned outright, which is broadly similar to other countries with a high rate of severe housing deprivation (Figure 2.12, Panel B).

This points to a major challenge that has been building up in the years since privatisation, as maintenance and renovation work has been insufficient, possibly due to an inability of households to afford such upgrades. Indeed, almost 30% of households report housing maintenance expenditures to be a heavy burden on their household financial situation (CSB, 2019[18]).

Households outside the Riga and Pieriga regions are most likely to report deficiencies in the quality of housing. For instance, nearly 40% of households in Latgale and more than 28% of households in Vidzeme reported a leaking roof, damp walls, floors or foundation, or rot in the window frames or floor, compared to less than 18% of households in Riga and Pieriga in 2018 (CSB, 2019[18]). Nevertheless, quality deficiencies relating to the broader neighbourhood (e.g. noise from neighbourhoods or the street; pollution or other environmental problems; and crime) are more likely to be reported in Riga, the country's most urbanised area.

Figure 2.11. **Housing deprivation among owner-occupied households**

Percentage of persons within each quintile reporting to live in housing with a leaking roof, damp walls, floors or foundation, or rot in window frames or floor, 2017

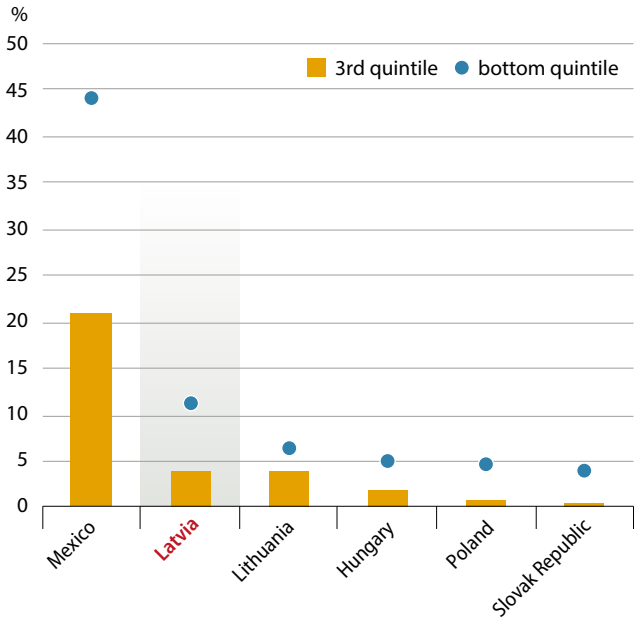


Note: Exclusion of first quintile - owners with a mortgage due to an insufficient number of observations

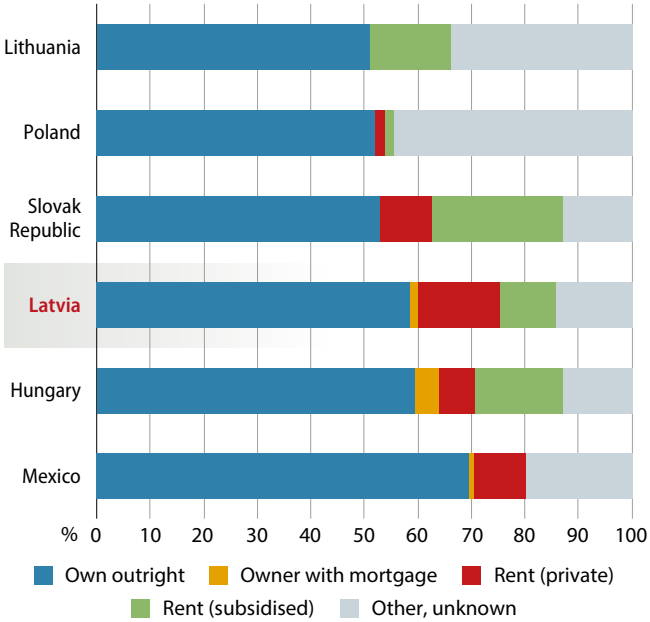
Source: Own calculations based on EU-SILC

Figure 2.12. **Population facing severe housing deprivation in selected OECD countries, 2017 or latest available year**

Panel A. Share of deprived population, bottom and third quintile of the income distribution, in percent.



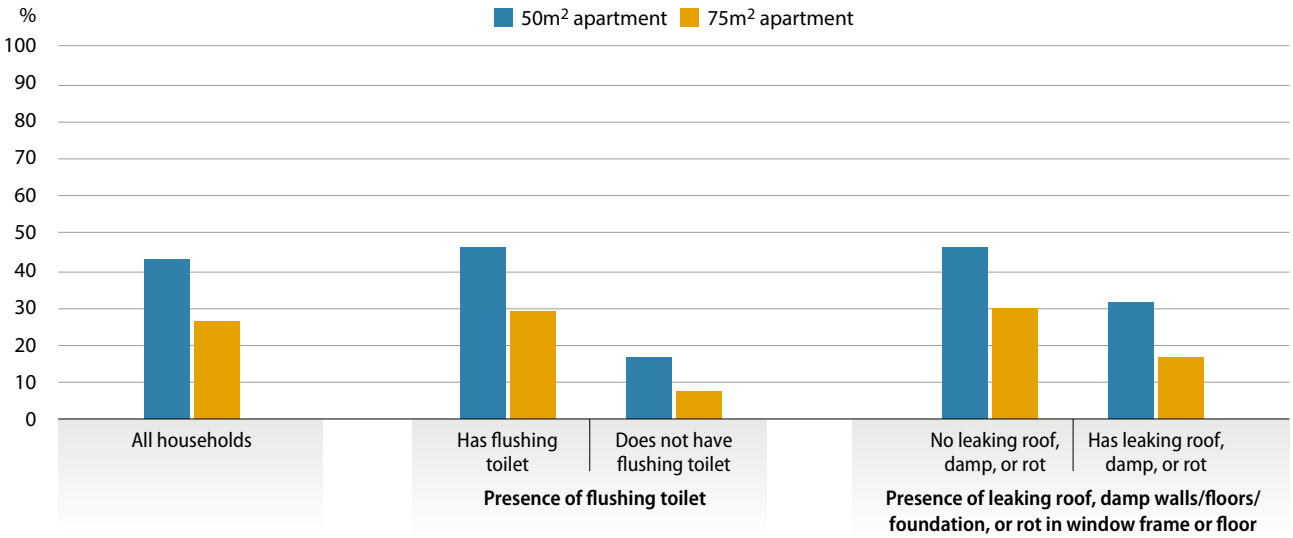
Panel B. Share of housing deprived population in the bottom quintile of the income distribution by tenure type, in percent.



Note: 1. Results only shown for countries where at least 4% of the population in the bottom quintile of the distribution is concerned.
2. Low-income population refers to the population with equivalised disposable in the bottom quintile of the (net) income distribution.

Source: OECD Affordable Housing Database, Indicator HC2.3. OECD calculations based on European Survey on Income and Living Conditions (EU SILC) 2017.

Figure 2.13. **Households with housing quality problems are much less likely to be able to afford a mortgage**
Estimated share of households that could afford a mortgage on an apartment without spending more than 30% of household disposable income on total housing costs, by apartment size, based on the average transaction price in Riga, Latvia, 2018



Note: "Could afford a mortgage" means that total housing costs (including utilities and maintenance) would consume less than 30% of total after-transfer household disposable income. Estimates based on the average transaction price for apartments in Riga (EUR 900 per m²). Annual mortgage costs estimated on the basis of a 30-year repayment mortgage with monthly payments. The interest rate is set at the 2019 average annual percentage rate of charge on loans to households (new business) for house purchase, as published by the Bank of Latvia (2.9%). This rate is assumed to remain fixed throughout the lifetime of the mortgage. Utilities and maintenance charges are assumed to cost EUR 2.5 per m² per month. It is assumed that the household already has access to a deposit worth 15% of the transaction price. The presence of a flushing toilet and the presence of leaking roof, damp walls/ floors/foundation, or rot in window frame or floor are based on self-reported information by households. Household disposable incomes are OECD estimates based on information from the European Union Statistics on Income and Living Conditions (EU SILC) survey 2018.

Source: OECD estimates based on the European Union Statistics on Income and Living Conditions (EU SILC) survey, Latio Residential Report: 1st Half of 2019 (http://latio.lv/en/services/market-analysis-and-review-1/housing-market), and Bank of Latvia Interest Rate Statistics (https://www.bank.lv/en/statistics/stat-data/interest-rate-statistics).

Housing quality is improving in Latvia, but much more needs to be done

There are signs of improvements in housing quality in Latvia. For example, since 2005, the share of the population in households that report a leaking roof, damp or rot has fallen by over a third, from 40% to 24% in 2018. Similarly, over the same period, the share of the population in households that are considered too dark has fallen from 15% to 8% (Eurostat, 2020[19]), and the share of households reporting an inability to keep their home warm has fallen from 30% to 8% (Eurostat, 2020[20]). The overcrowding rate for poor households has fallen by 17 percentage points, from 51% to 34%, since just 2010 (OECD, 2019[7], Indicator HC2.1).

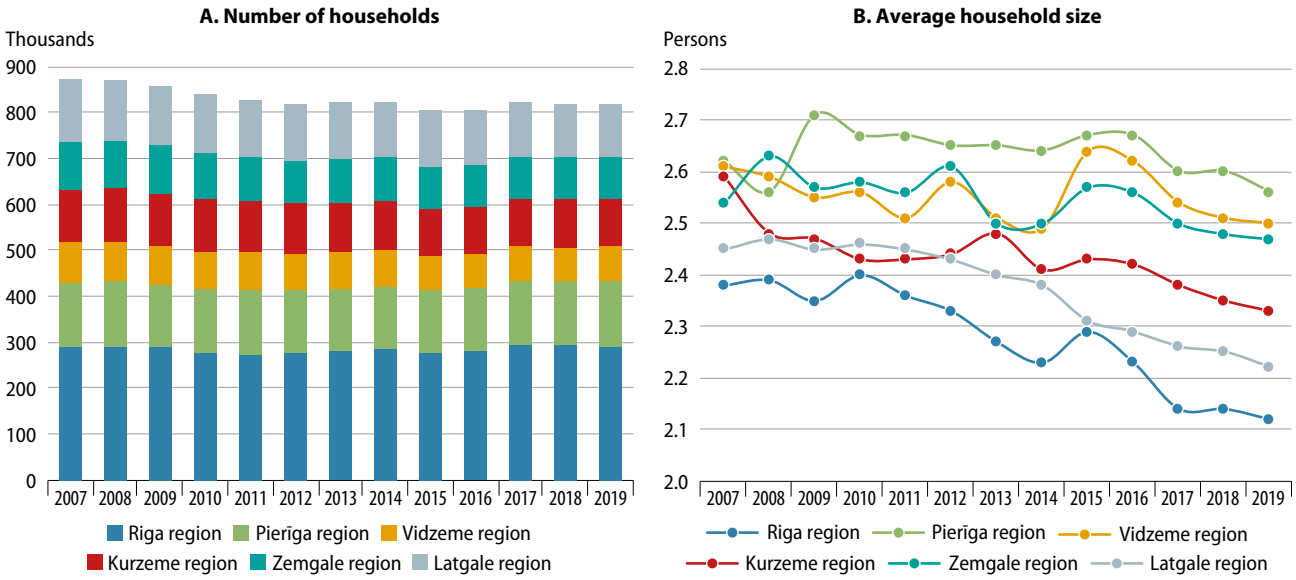
Still, there is more to be done. Despite progress, housing conditions in Latvia remain some of the poorest in the OECD, with important implications for the health and living standards of the Latvian population. There are also indications that, in some areas, improvements are slowing. For example, the reduction of the share of the population experiencing a leaking roof, damp or rot has levelled out since around 2010. Progress on reducing overcrowding has also slowed in recent years ((OECD, 2019[7]), Indicator HC2.1).

Many households are effectively stuck in poor quality housing

The housing quality challenges faced by many Latvian households are compounded by the fact that many are not able to move to a new, better-quality home. Latvia's under-developed rental market and the inaccessibility of mortgages means that many people have no option but to remain in the current dwelling.

As an example, Figure 2.13 shows the share of households with two common types of housing problem – the absence of an indoor flushing toilet, and the presence of a leaking roof, damp or rot – that could afford a mortgage on either a 50m² or 75m² apartment, based on the same assumptions as used earlier in Figure 2.6. Across Latvia as a whole, only around 17% of households that do not currently have a flushing toilet have a disposable income high enough (at least EUR 11 400) to afford a new mortgage on a 50m² apartment, and only 8% have an income high enough (at least EUR 17 100) for a mortgage on a 75m² apartment. Those suffering from a leaking roof, damp or rot fare slightly better, but not by much. Among these households, less than one-third (32%) could afford a mortgage should

Figure 2.14. **Evolution of households in Latvia**
2007-2019, by region



Source: Central Statistical Bureau of Latvia, Based on Table ISG060

they wish to move to a 50m^2 apartment, and only 16% could afford the mortgage on a 75m^2 apartment.

Emerging housing affordability challenges

Efforts to promote housing affordability over the long term should take into account emerging demographic trends and affordability challenges. This is especially important when the housing supply is inelastic and the market reacts relatively slowly to the changing needs of the population, as is the case in Latvia.

Latvia's housing stock consists of a large share stock of multi-apartment dwellings built during the Soviet era. These buildings were often constructed in proximity to urban centres, with good access to public transport and services. However, the quality of these buildings is deteriorating. Most of these apartments have been privatised, resulting in a large number of individual homeowners within a multi-dwelling building. This not only makes the management of buildings difficult due to high fragmentation of owners in a single multi-unit building, but also leads to insufficient renovation and maintenance work, as interests and financial means among owners are diverse.

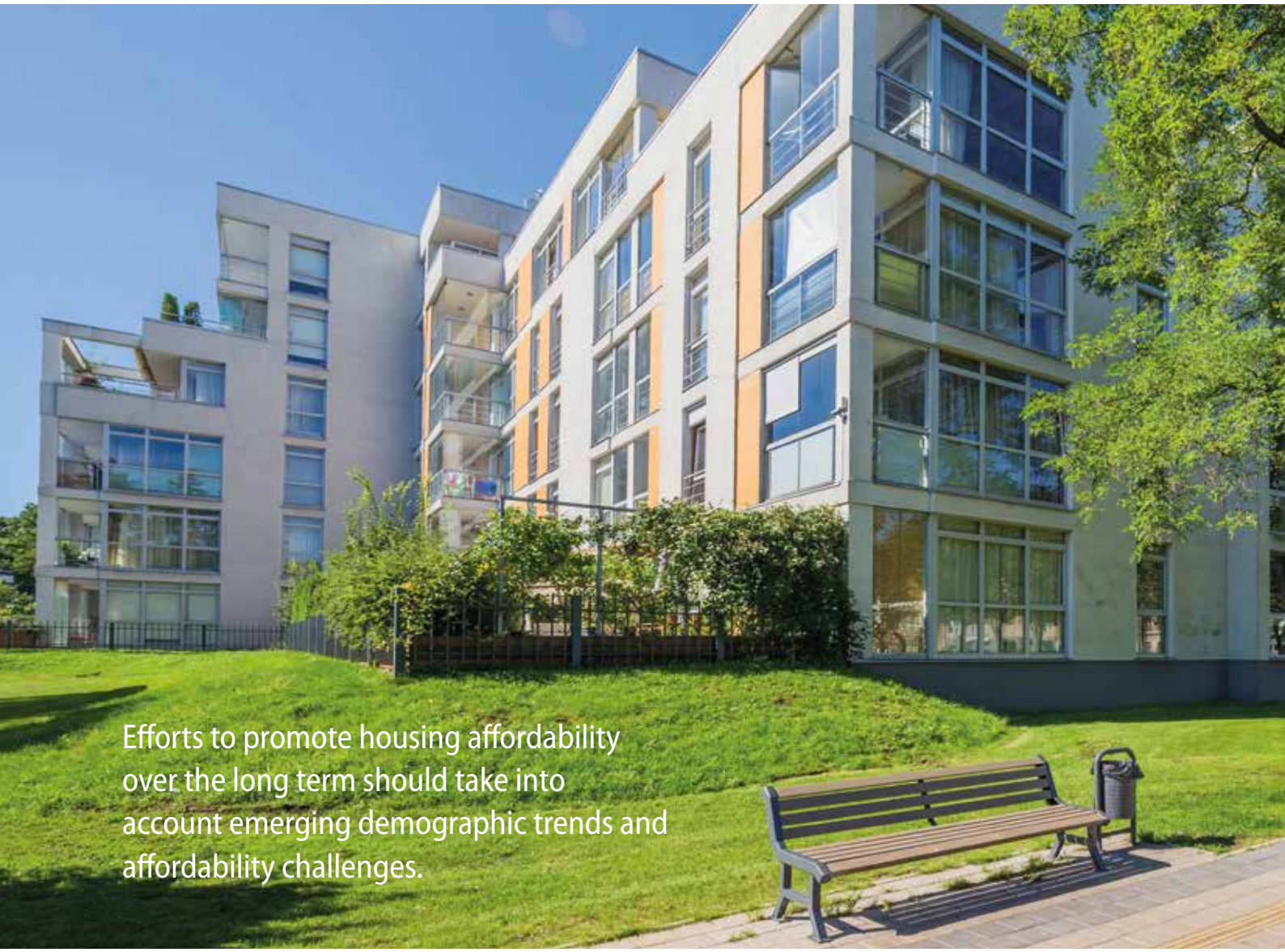
Comprehensive data on the technical quality of the housing stock is not available, though an initial audit of a portion of the dwellings has been undertaken. It is therefore necessary to improve data collection with respect to housing quality through a comprehensive assessment of the building stock, with a particular focus on the Soviet-era buildings, which in Riga are home to about 85% of the population. This will facilitate a better understanding of how best to improve the quality of these buildings. As will be discussed, the experience of the Slovak Republic could be highly relevant for Latvian stakeholders.

Demographic changes will also influence the type of housing that will be needed in the future. As in most OECD countries, households are getting smaller. From 2007 to 2019, the average household size in Latvia decreased from 2.5 to 2.3, driven by an increase in single-person households (Figure 2.14). Large flows of outmigration after the global financial crisis of 2008/2009 resulted in a drop in the number of total households in most Latvian regions, although the emigration rate has since returned to pre-crisis levels. Still, the trend towards smaller households may require the supply of a larger share of smaller dwellings to target single households. Not only is the average household size decreasing, Latvia's population is also ageing. This could imply efforts to upgrade existing dwellings or equip new dwellings with accessibility features for an ageing and less mobile population. Alternately, housing for seniors, such as "senior villages", could be envisaged that would enable ageing people to live in a collective environment with access to services where needed. Meanwhile, families will still require access to larger housing to improve housing overcrowding rates.

Improving the measurement of housing affordability in Latvia

Properly assessing housing affordability requires detailed information that go beyond the costs of housing and housing-related expenses, but also capture – among other things – household characteristics, housing needs, housing conditions, dwelling age and type, accessibility, location and neighbourhood, community engagement, and access to jobs and services. To fully inform policy, this information needs to be collected regularly and ideally be available at local level. At present, Latvia, like many other OECD countries, lacks the data required to perform a comprehensive assessment of housing affordability.

One option that Latvia should consider is the possibility of conducting a dedicated housing survey aimed at collecting detailed information on housing and housing affordability, including information on regional differences. Canada, for example, runs the dedicated Canadian Housing Survey (CHS) every two years (Statistics Canada, 2019[21]). The data collected contains a range of information useful for assessing housing affordability in Canada, and the large sample size – 60 000 households – means that the data can be broken down and disaggregated in many ways (see Box 2.2). Other examples include Australia's Survey of Income and Housing (ABS, 2019[22]), conducted every two to four years, and France's *Enquête Logement* (Housing Survey) (Insee, 2020[23]), run every four to seven years. Dedicated surveys are expensive, but costs can be limited to some extent by running the survey at extended intervals, such as every four years, as in France.



Efforts to promote housing affordability over the long term should take into account emerging demographic trends and affordability challenges.

A second option would be to add questions on housing affordability and quality to an existing household survey, for instance as a "module" run at regular intervals. Ideally, such a survey would already include information on at least household characteristics and income levels. Eurostat regularly use this approach when looking to collect information on topics not already covered in their regular surveys, such as the annual ad-hoc modules attached to EU SILC. Questions about both housing affordability and housing quality should be included.

In the short term, a first step for Latvian authorities could be to use the rental registry (discussed further in Section 4.1 and Box 4.3) to collect more comprehensive data on the rental housing market. This could be particularly useful to assist authorities in assessing the affordability and quality of rental dwellings, for which very few data are presently available. Concretely, this could be in the form of a template rental contract provided by the national government that includes data on the rental dwelling (such as the size, price, location, number of rooms, price with and without utilities, etc.). A second, essential step would be to undertake an assessment of the technical quality of dwellings across Latvia. The Slovak Republic commissioned a large-scale assessment of the technical quality of housing in the early 2000s, which also included an assessment of the energy efficiency of the housing stock, resulting in an inventory of the technical quality of the housing stock. This type of large-scale survey of the housing stock should be a priority in Latvia, and European funding could be available.

Left: Apartment block in Aleksandra Caka Street, Riga

Box 2.2: **THE CANADIAN HOUSING SURVEY**

The Canadian Housing Survey (CHS) is a dedicated, stand-alone, nationally-representative household survey on housing needs and experiences in Canada. The survey was first run in 2018-2019. Statistics Canada intends to repeat the survey every two years until at least 2028.

The CHS contains questions on a number of areas relevant to housing affordability. These include questions on housing costs, housing-related utility costs, dwelling type and tenure status, housing needs and waiting times for social housing, housing conditions, neighbourhood services and neighbourhood conditions, accessibility, community engagement, and housing histories. Other relevant questions include questions on health outcomes and experiences of homelessness, as well as a range of background questions on household characteristics.

The sample for the first wave consisted of over 60 000 households, with an over-sample on the population in social housing. Most interviews were conducted remotely, using self-response electronic questionnaires (rEQ) and Computer Assisted Telephone Interviewing (CATI), though in-person interviews were used in some areas.

The first set of results from the CHS were released in November 2019. This included findings on waiting times for social housing, housing satisfaction, and housing suitability and housing conditions. Further releases, including the raw micro-data, are scheduled for 2020.

Source: (Statistics Canada, 2019[21])

Family house in Jurmala.

Housing is not only an important aspect for individual well-being, but also for the economy more broadly.

3. State of play: Policies to promote housing affordability in Latvia

This chapter discusses the importance of promoting housing affordability, followed by a snapshot of current housing policy and spending priorities in Latvia and across the OECD. It assesses the key underlying pre-Covid-19 housing policy issues in Latvia. The Covid-19 pandemic, which has been unfolding at the time of publishing this study, has highlighted just how important housing issues are to people.

WHY PROMOTE HOUSING AFFORDABILITY? ECONOMIC BENEFITS AND IMPROVEMENTS TO WELL-BEING

Housing is not only an important aspect for individual well-being, but also for the economy more broadly. Housing market developments influence the distribution of income and wealth, as housing is the largest spending item in household budgets and often the largest asset in household balance sheets (OECD, 2019[7]; Balestra and Tonkin, 2018[24]; Causa and Woloszko, 2019[25]) Housing is therefore a fundamental driver of the accumulation and the distribution of wealth. Thus, housing market developments influence the business cycle and macroeconomic trends. Household wealth, income and expenditure are influenced through changes in house prices, rents and mortgage interest rates - often with a sizeable impact on aggregate demand and inflation. House price fluctuations also affect GDP through residential investment. Cournède, Sakha and Ziemann (2019[26]) show that countries with sharper declines in residential investment in the aftermath of the global financial crisis have generally needed more time to recover from the crisis and regain the pre-crisis level of real GDP (Cournède, Sakha and Ziemann, 2019[26]).

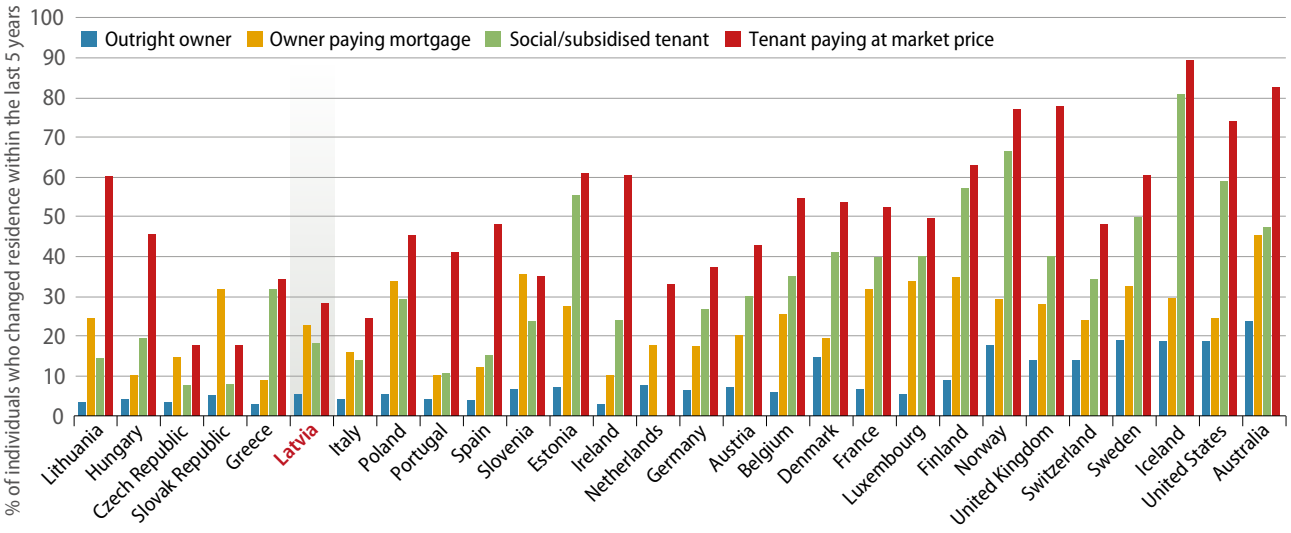
Policies aiming to reduce the likelihood of severe economic downturns, slower recoveries and weaker growth aim to minimise house price volatility (Cournède, Sakha and Ziemann, 2019[26]). Different measures include, for example, tighter loan-to-value (LTV) caps, stronger banking supervision, and more responsive housing supply (Andrews, Caldera Sánchez and Johansson, 2011[27]). However, these links are not always clear-cut with respect to economic performance. For example, in reaction to the severe impacts of the financial crisis, Latvia introduced tighter LTV caps (which nonetheless remain relatively loose at 90-95% of LTV). In principle, while tighter LTV caps can help reduce the risk of severe downturns in the future, such measures also limit the access to credit for many households, contributing to lower residential investment and thereby a slower economic recovery after the global financial crisis.

Housing, residential mobility and the labour market

Availability of affordable housing also influences internal geographic mobility, which can have significant impacts on economic performance (Box 3.1). The ease of moving residence has implications for the functioning of the labour market, as it affects the job-matching process and use of human resources. For example, for Scotland, MacLennan and O'Sullivan (2015) estimate that 19 000 jobs could be sustained for every 12 000 affordable homes built, taking into account other positive multiplier effects, which translates to about GBP 2.6 billion of economic output generated. Thus, the potential impacts of affordable housing may include i) the economic growth and productivity effects arising from the construction phase, as well as ii) additional positive effects resulting from a sufficient stock of lower or moderately priced housing to support economic development more broadly through a larger pool of workers living in and around cities who are able to access employment opportunities. For Austria, the Federal Ministry of Science, Research and Economy (2015) estimated that for an investment of about EUR 6 billion, about 30 000 additional affordable housing units could be built over the course of 5 to 7 years, which was expected to create an economic impulse of 0.4% additional GDP growth per year (BMWFW, 2015).

Residential mobility in Latvia is well below the EU average overall, and especially for outright owners (Figure 3.1). Further, higher home ownership rates are associated with higher skill mismatch, as residential mobility tends to be low (Andrews, Caldera Sanchez and Johansson, 2011[28]). Causa and Pichelmann (forthcoming

Figure 3.1. **Residential mobility by household tenure status**
Share of individuals who changed residence within the last 5 years, by tenure status, 2012



Source: Causa and Pichelmann, forthcoming 2020. OECD Calculations based on 2012 EU SILC Data for EU countries, AHS 2013 for the United States, HILDA 2012 for Australia.

2020[29]) find that residential mobility in Latvia is very low from an OECD perspective: 9.7% of Latvians have changed residence over a 5-year period, compared to, for instance, 39% in Sweden and 28% in France. Further, just 0.5% of individuals have changed residence for employment-related reasons over a 5-year period, compared to 2% in France or 4% in Germany. As in all countries, owners are much less mobile than renters, but (the few) renters in Latvia are not very mobile (less than 30%), which is lower than in Lithuania and Hungary, which also feature high rates of homeownership.
The large share of owner-occupied housing in Latvia results in limited housing alternatives for people who would like to move to economic centres to access better employment opportunities. High rates of home ownership, especially in an environment with strong tenant protection as has been the case in Latvia, can contribute to the two mutually reinforcing challenges: i) an underdeveloped rental market; and ii) low residential and labour mobility, especially for lower-income outright owners, as opportunity costs to move are higher.

Skill mismatches in the Latvian labour market are increasingly affecting economic performance. Vacancy rates in Latvia have been increasing, a development that is not only limited to the main economic centre of the Riga region, but can be observed across regions (Figure 3.2). The national job vacancy rate in Latvia between the end of the first quarter in 2016 and 2019 almost doubled from 1.6% to 3.0%. The Latgale region showed the highest increase in the job vacancy rate over the same period, from 1% to 2.9%. As this region is also characterised by high unemployment, the increase in vacancy rates could indicate poor matching of skills, potentially reinforced by a virtually non-existent rental market. In the Latgale region, as well as other regions outside Riga, investment in housing has been low, due to the population's low purchasing power and the limited access to long-term financing. A person with limited job opportunities in the area where he or she owns a house might therefore face high opportunity costs to move to an area that may provide greater economic opportunity but lacks a supply of affordable housing.

By distorting the optimal allocation of resources, skill shortages and mismatch are reducing average productivity (Adalet McGowan and Andrews, 2015[41]). Reducing skill-mismatches in Latvia can be expected to have a positive effect on productivity and thereby the economy. Residential mobility can facilitate a more efficient allocation of labour (Adalet McGowan and Andrews, 2015[41]). The impact of greater residential mobility on the Latvian economy could be significant given the low level of mobility and the increasing number of job vacancies left vacant. For example, expanding active labour market policies, which similarly to residential mobility help labour reallocation towards more productive uses (Adalet McGowan and Andrews, 2015[41]), is estimated to increase GDP per capita by 1.6% over 10 years (OECD, 2019[4]). Making the private rental market more affordable and attractive (discussed in Section 4.2) could help to improve labour mobility.

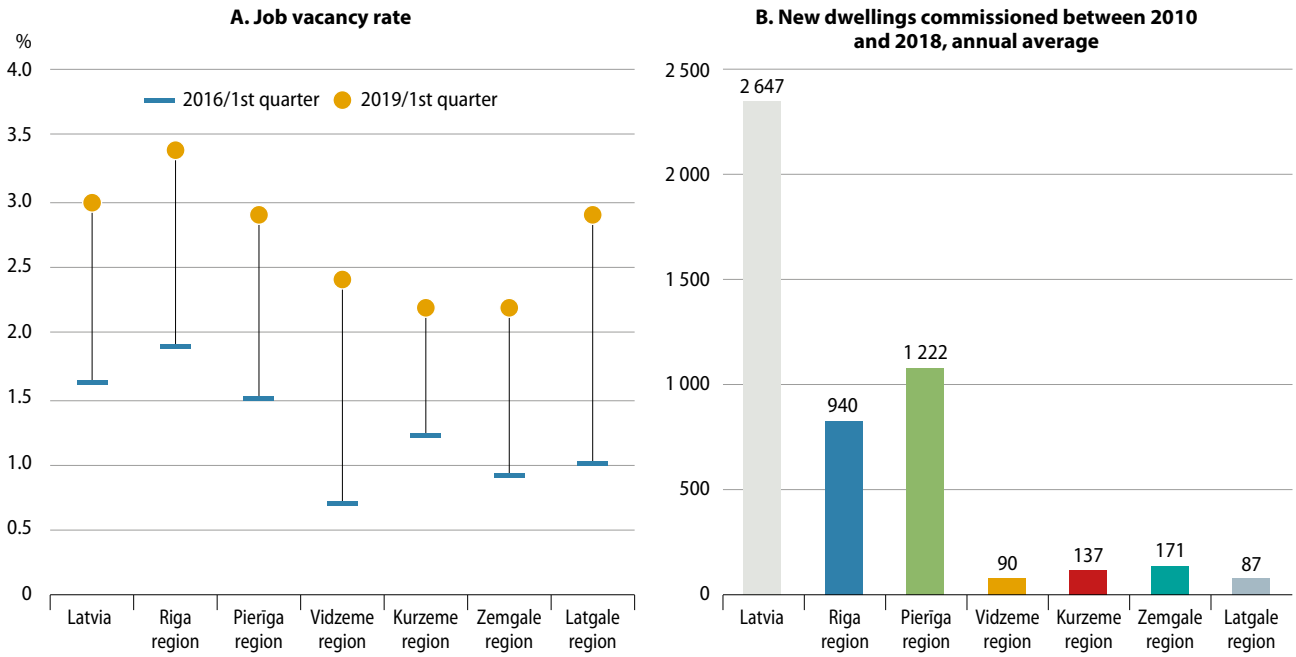
Box 3.1: **THE IMPORTANCE OF RESIDENTIAL MOBILITY FOR THE LABOUR MARKET**

Residential and geographical mobility contribute to the efficient matching of jobs and the allocation of human resources within the labour market (Henley et al., 1994), especially in the event of permanent shocks requiring a reallocation of production factors – such as sector and structural changes related to globalisation or technological progress (Janiak and Wasmer, 2008[30]). For instance, studies have shown that in the United States adjustment to shocks largely occurs through migration between regions (Blanchard et al., 1992[31]; Decressin and Fatás, 1995[32]). Indeed, there is a positive correlation across countries between residential mobility and reallocation of workers. Policy interventions in housing markets may affect labour mobility and could give rise to mismatches and other inefficiencies in these markets (van der Vlist et al., 2002[33]).

Macro studies across countries or regions suggest that high homeownership is associated with low residential mobility and high unemployment (Blanchflower and Oswald, 2013[34]; Oswald, 1996[35]). Micro-data, on the other hand, tend to indicate that owning a home makes people more likely to be employed than when renting, thereby pointing at a positive effect at the individual level. Some research indicates that the contradictory findings can be explained by homeowners – especially those who have to pay off their mortgage – who are likely to accept lower wages in order to take up employment in the region. This effect is enforced when transaction costs of selling a house are high. Thus, once a region faces an economic downturn followed by large unemployment – a trend that is present in some regions in Poland - homeowners experience for one a lower likelihood to find a local job even when they are willing to accept wage cuts (Coulson and Fisher, 2009[36]; Head and Lloyd-Ellis, 2012[37]; Munch, Rosholm and Svarer, 2006[38]). Second, homeowners may be constrained in their geographical mobility as they have negative home equity or because they anticipate serious difficulties in selling their current home (Chan, 2001[39]; Karahan and Rhee, 2019[40]) (Causa et al, forthcoming). To identify the exact channels and the relative importance of tenure choice on labour market mobility and outcomes, further research is needed.

Sources: Henley, A., R. Disney and A. Carruth (1994), "Job tenure and asset holdings", Economic Journal, Vol. 104; Janiak, A. and E. Wasmer (2008), "Mobility in Europe – Why it is low, the bottlenecks and policy solutions", European Economy, Economic Papers, No. 340, Directorate-General for Economic and Financial Affairs, European Commission, Brussels, September, available at: http://ec.europa.eu/economy_finance/publications/publication13173_en.pdf; Decressin, J. and A. Fatas (1995), "Regional Labor Market Dynamics in Europe", European Economic Review, Vol. 39; Blanchard, O. and L.F. Katz (1992), "Regional evolutions", Brookings Papers on Economic Activity, No. 1; Van der Vlist, A. et al. (2002), "Residential mobility and local housing market differences", Tinbergen Institute Discussion Paper, TI 2002-003/3; Oswald, A.J., (1996), A Conjecture on the Explanation for High Unemployment in the Industrialized Nations: Part I, The Warwick Economics Research Paper Series (TWERPS), University of Warwick, Department of Economics; Blanchflower and Oswald (2013), "Does high home-ownership impair the labor market?" NBER Working Paper No. 19079; Munch, J.R, Rosholm, M., Svarer (2006). Are Homeowners Really More Unemployed? The Economic Journal, Volume 116, Issue 514, p991-1013; Head, Allen, and Huw Lloyd-Ellis (2012), "Housing liquidity, mobility and the labour market." The Review of Economic Studies; Coulson, N. Edward, and Lynn M. Fisher (2009), "Housing tenure and labor market impacts: The search goes on." Journal of Urban Economics 65(3): 252-264. Chan, S. (2001), "Spatial lock-in: Do falling house prices constrain residential mobility?", Journal of Urban Economics, Vol. 49, No. 1; Karahan, F. and S. Rhee (2019), "Geographical reallocation and unemployment during the Great Recession: The role of the housing bust", Journal of Economic Dynamics and Control, Vol. 100: 47-69.

Figure 3.2. **Job vacancy rates have been increasing**



Source: Central Statistical Bureau, Latvia, database JVS030c and BUG050.

Housing, well-being and economic growth

Aside from the direct effects of housing on the economy, indirect effects of housing emerge relative to people's well-being. Living in satisfactory housing conditions is one of the most important aspects of people's lives, and access to good-quality affordable housing is key to achieving a number of economic and social policy objectives. The quality of housing itself is closely linked to health outcomes, for example through access to basic hygiene facilities within the dwelling. People living in low quality housing and poorer neighbourhoods tend to have worse health outcomes: poor air quality, high levels of noise, overcrowding, as well as the prevalence of mould, lead or asbestos in a dwelling can affect individuals' health (OECD, forthcoming, 2020[42]). The broader neighbourhood environment – including proximity to pollution or crime, as well as access to quality schools and public services – also matters for individual health outcomes.

Health outcomes, in turn, affect peoples' participation in the labour market and therefore can affect economic growth. In addition, quality housing can result in long-term savings to health and other social services, for example, through the cost and psychological benefits arising from those with long-term health issues being able to live safely at home rather than enter some form of institutional care. In contrast, the deterioration of the housing stock and accompanying poor living conditions may have a negative impact on physical and mental health, relations with others, and children's development. Good quality affordable housing was shown to be important for the health and educational development of children, ultimately supporting social mobility (see e.g. McCartney et al., 2017[43] for a literature overview).

CURRENT HOUSING POLICY AND SPENDING PRIORITIES

This section discusses the current housing policy and spending priorities in Latvia, as well as an assessment of how these compare to other OECD countries. It begins with an overview of housing policy measures in OECD countries, drawing on country responses to the OECD Questionnaire on Affordable and Social Housing (QuASH). It then outlines the main housing policy instruments currently in operation in Latvia, which provide support for, on one end of the spectrum, very low income households, and, on the other end of the spectrum, higher-income households. The result is a "missing middle" of households are not eligible for public support for housing.

Overview of housing policy measures in OECD countries

Many countries have identified boosting housing affordability and stimulating the overall supply of (affordable) housing as top housing policy concerns ((OECD, 2019[7]) indicator PH1.2). It is clear that there is no silver bullet, or single policy instrument, that can single-handedly help achieve these objectives.

Across the OECD, governments use a wide range of policy instruments to increase housing supply and make housing more affordable, often in partnership with other public, private and not-for-profit organisations. This can include direct support to households to reduce overall housing costs (such as housing benefits, grants or loans to help buy or rehabilitate a home), or in the form of social housing. This may also include support to housing developers to increase the overall housing supply (through grants, loans or subsidised land, as well as measures to reduce construction costs). In addition, through legislative or regulatory measures, governments can create the enabling conditions that establish the rules of the game for specific housing tenure types (such as rental housing), minimum standards of housing quality, or the emergence of different types of actors in the housing market (such as non-profit housing associations). Other types of public support for housing may include developing financing mechanisms, such as revolving funds, bonds or mortgage guarantees, to facilitate both housing development and acquisition. For definitions and descriptions of the range of policy instruments that are primarily used by national governments in OECD countries, see Table 3.1. The remainder of this section provides an overview of housing policy tools across OECD countries; more detailed country examples are presented in Chapter 4.

Among the most common public tools used by governments to make housing more affordable are i) various types of support to homeowners and homebuyers, ii) housing allowances, and iii) social housing. Drawing on results from the 2019 OECD QuASH, which are summarised in Figure 3.3:

- Public support to prospective and existing homeowners is widely available across OECD countries, and has several forms:
  - 28 out of 33 reporting OECD countries offer **tax relief for homeowners**, which are most often in the form of one-off tax relief for buying a home, tax relief for mortgage payments, or tax deductions on mortgage interest payments. For the vast majority of measures

offering tax relief, there are no income thresholds to determine eligibility, potentially pointing to regressivity in the tax system with respect to housing.

- 26 of 31 OECD reporting countries provide some form of **subsidy to households to facilitate home ownership**; these are often in the form of grants or loans to first-time homebuyers. Some countries offer more than three different types of subsidies to households (e.g. Australia, Chile, Ireland, Mexico, and Spain).

- 23 of 31 OECD reporting countries offer **mortgage support to households**, most often in the form of subsidised mortgages or mortgage guarantees.

- All but one of 34 OECD reporting countries offer **support to finance housing regeneration** – that is, improvements to the quality of existing dwellings, which may also include energy efficiency upgrades.

- All but one of 34 OECD reporting countries provide **housing allowances** (also known as housing benefits or vouchers) in the form of cash transfers earmarked to support housing costs. The vast majority of housing allowances are means-tested, although the income threshold varies considerably across countries.

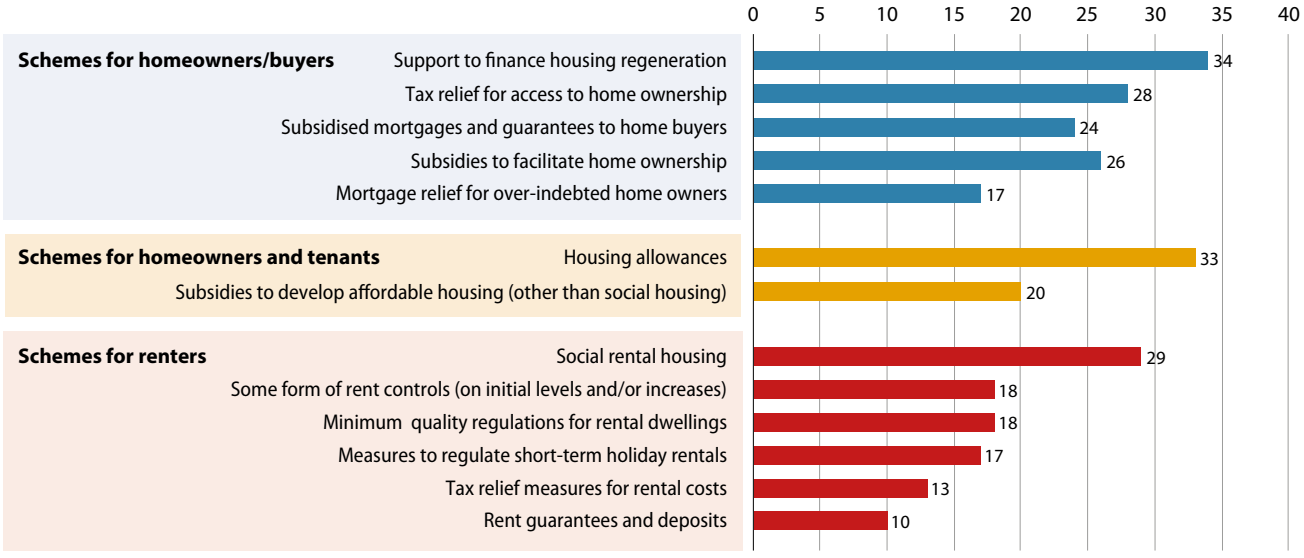
- **Subsidised (social) rental housing** exists in 28 of 35 OECD reporting countries. Governments may support the subsidised rental housing supply through direct provision of social housing, or by supporting the sector through grants, tax credits, loans and/or loan guarantees to social housing providers. The majority, but not all, of social housing programmes are means-tested, though income thresholds may be more or less restrictive, depending on the country.

- Public support in **the private rental market** is much more piecemeal across countries, spanning tax relief, rent guarantees or deposits, and regulations (at national, regional or local level).

- Public support provided to **property developers to construct new affordable housing** may be in the form of loans (9 countries), grants (8 countries), tax relief (6 countries), subsidised land (4 countries) or other types of support. Measures may target different tenure types: 10 countries provide financial support to developers, regardless of tenure; 9 countries provide support to developers of affordable rental housing; and 8 countries provide support to developers of affordable owner-occupied housing.

Figure 3.3. **Housing policy overview: The majority of OECD countries have housing allowances, social housing and financial support for home ownership**

Number of OECD countries adopting each type of policy measure



Notes: The 2019 OECD Questionnaire on Affordable and Social Housing (QuASH) was circulated to nearly 50 countries, including all 36 OECD countries, 5 non-OECD countries in the European Union, and 8 Key Partners/Accession countries. Not all countries responded to all sections of the QuASH, thus the number of reporting countries varies across policy instruments.

Source: (OECD, 2019[7]), Indicator PH1.1. Draws on country responses to OECD QuASH, 2019 and 2016.

Table 3.1. **Types of housing policy tools used across the OECD and in Latvia**

Type of measure	Description	Relevance in Latvia
Support for homeowners and home buyers		
Subsidies to homebuyers to facilitate home ownership	These measures include one-off grants for the purchase of a residential dwelling, covering part or all the value of the dwelling. They are often reserved for first-time homebuyers with income levels below a given threshold who purchase dwellings with certain characteristics (cf. Indicator PH2.1 in the OECD Affordable Housing Database).	
Subsidised mortgages and mortgage guarantees for homebuyers	Subsidised mortgages provided by or subsidized by the government, for the purchase of a residential dwelling; measures can also consist of down payment assistance or mortgage guarantees provided by the government (see indicator PH2.1).	State assistance in purchase or construction of residential space (Housing acquisition support programme) *(Valsts palidziba dzivojamas telpas iegadei vai buvniecibai (Majoklu garantiju programma))*
Mortgage relief for over-indebted homeowners	Subsidies and measures to avoid foreclosure on residential dwellings that are owned by households in financial distress. These include subsidies for mortgage payments and payment of arrears, postponement of payments, refinancing mortgages, and mortgage-to-rent schemes (see indicator PH2.1).	
Tax relief for homeowners	Tax deductions or tax credits granted to individual taxpayers for the purchase of their main residence. These may include tax relief measures such as mortgage tax relief or tax relief to first-time homebuyers for the costs (e.g. legal fees, disbursements and land transfer taxes) associated with the purchase of a home (see indicator PH2.2).	One-off fee reduction for registering property ownership (available only to families with children who benefit from the state guarantee programme)
Support to finance housing regeneration	Tax deductions, tax credits and/or grants to finance the regeneration of existing residential dwellings (e.g. energy efficiency improvements, quality upgrades, etc.).	
Support for homeowners and tenants (tenure neutral)		
Housing allowance	Recurrent means-tested income transfers to households paid to either owners or tenants towards their housing costs. Housing allowances can include rent, payment of mortgage and/or interest, utilities, insurance and services (see indicators PH3.1, PH3.2, PH3.3).	Housing benefit *(Dzivokla pabalsts)*
Subsidies to develop affordable housing	Measures providing grants, tax relief or subsidised land to developers to finance the development of new affordable housing. Such measures may also include rental housing, "shared ownership" and "rent-to-buy" schemes (see indicator PH 5.1). These schemes do not take into account measures to help finance the development of social housing.	

Main housing policy instruments in Latvia and the "missing middle"

The main housing policy instruments in Latvia are summarised in Table 3.2, along with their key characteristics. There are two types of support for (very) low-income and other vulnerable households, consisting of social rental housing and housing benefits. A second type of support, which is available to households at the higher end of the income distribution, consists of a mortgage guarantee to support families with children and young specialists in the purchase or construction of a home. Families with children who benefit from the state housing guarantee programme may also be granted a one-time reduction of property ownership registration fees. Finally, more broadly, regulations in the private rental market are in place, including minimum quality standards for rental housing relating to lighting and ventilation, heating, hygiene and suitable for long-term human shelter and placement of household items.

Support for very low-income households: Social housing and housing benefits

Latvia has two primary housing measures to support low-income households: social housing and housing benefits. These are indeed among the two most common types of housing support for low-income households in the OECD. In Latvia, as in the vast majority of OECD countries, both of these measures are means-tested, which helps to ensure that the support reaches households in need. However, the eligibility requirements to determine which households can receive support, and – in the case of housing allowances – the amount of support that is provided, varies considerably across OECD countries. In the case of Latvia, the two primary

Type of measure	Description	Relevance in Latvia
Support for the rental market		
Social rental housing	Residential rental accommodation provided at sub-market prices and allocated according to specific rules rather than according to market mechanisms. Programmes in this area can cover construction, regeneration, management, maintenance and financing of social rental housing (see indicators PH4.1, PH4.2, PH 4.3).	Social housing
Tax relief measures for rental costs	Tax deductions or tax credits to individual taxpayers for rental housing-related expenditures in the market rental sector. Tax relief measures may aim to benefit tenants and/or owners/landlords of rental dwellings.	
Rent guarantees and deposits	Publicly provided guarantees on rents or deposits in the market rental sector.	
Rent controls or ceilings	Restrictions on initial rent levels and/or rent level increases (for sitting tenants and/or for new tenants) in the private rental market (see indicator PH 6.1).	
Minimum quality regulations for rental dwellings	Legal requirements to ensure a minimum level of quality of dwellings available for rent; these may include, for instance, minimum requirements relating to safety, health and maintenance (see indicator PH 6.1).	Minimum quality regulations in place for rental dwellings
Measures to regulate short-term holiday rentals	Measures vary, but may include restrictions on the number of days that a holiday rental property can be leased over the course of a year; the mandatory presence of hosts on the property during the stay; the imposition of taxes and/or fees to such properties, etc. (see indicator PH 6.1).	

Note: 1. See (OECD, 2019[7]), PH1.1 for definitions of each policy instruments used in this table. 2. The list of policy types refers to OECD countries surveyed through the 2019 and 2016 Questionnaire on Affordable and Social Housing (QuASH); not all countries responded to all sections of the QuASH. 3. Limited information was provided for Greece, Hungary, Korea, Slovenia and Turkey.

Source: (OECD, 2019[7]), Indicator PH1.1, www.oecd.org/els/family/PH1-1-Policy-instruments-levels-of-governance.pdf; Indicator PH2.1, www.oecd.org/els/family/PH2-1-Public-spending-support-to-home-buyers.pdf; Indicator PH2.2, www.oecd.org/els/family/PH2-2-Tax-relief-for-home-ownership.pdf; Indicator PH3.2, www.oecd.org/els/family/PH3-2-Key-characteristics-of-housing-allowances.pdf; Indicator PH4.3, www.oecd.org/els/family/PH4-3-Characteristics-of-social-rental-housing.pdf; Indicator PH6.1, www.oecd.org/els/family/PH6-1-Rental-regulation.pdf; and Indicator PH5.1, www.oecd.org/els/family/PH5-1-Measures-financing-affordable-housing-development.pdf. Draws on country responses to the OECD Questionnaire on Social and Affordable Housing (QuASH), 2019 and 2016.

support measures only reach a small share of the needy population, and in most cases provide minimal levels of support to households.

The national government sets a minimum income threshold for households to qualify as "poor family" (*trūcīga ģimene*) at a monthly income of EUR 128 per person over the past three months (equivalent to around 30% of the minimum wage in 2018). Households who qualify are then eligible to benefit from social housing, which is operated by municipalities. Based on the most recent available data, around 13 300 households were living in social housing in 2016, representing less than 2% of all households. The income threshold to qualify for social housing has not been adjusted since 2009, suggesting that – given inflation trends – even fewer households today would qualify for social housing today under the same income threshold compared to a decade ago. An eligible person can only apply for assistance in the municipality where she resides. To apply for social housing in a different municipality, a person would have to move there first (OECD, 2017[44]).

Further, Latvia has one of the smallest social housing stocks in the OECD. Social housing made up around 0.35% of the total housing stock in 2016. In addition, municipalities offer another type of housing to vulnerable and low-income households under the Law on Assistance in Solving Apartment Matters. Around 16 500 apartments are registered as municipal dwellings, although roughly 20% of this stock is vacant because the dwellings are not suitable for living. Combined, social housing and municipal housing comprise just under 2% of the total housing stock. As a point of comparison, the

Table 3.2. **Main housing policy instruments in Latvia**

Type of aid	Measure	Description	Income threshold?	Eligibility requirements (beneficiaries, dwelling)	Budget (2018)	Level of government
Mortgage guarantees for home-buyers	State assistance in purchase or construction of residential space (Housing acquisition support programme) *Valsts palidziba dzivojamas telpas iegadei vai buvniecibai (Majoklu garantiju programma)*	Guarantee for the first instalment for the loan for acquisition or construction of housing. It supports families with children and young specialists to secure the first instalment for the loan for acquisition or construction of housing. For families with children: guarantee up to 10 years, varying between 10-20% of loan size (depending on number of children), with a maximum guarantee of EUR 20 000 to support dwellings of up to EUR 200 000 in value. For young specialists (persons who have acquired the vocational secondary or higher education and do not exceed the age of 35): guarantees up to 10 years. Maximum guarantee up to 20% of the loan size (up to EUR 50 000), no restriction on the deal size.	No	Initially targeted to families with children, then extended to young specialists. For both groups, there are limits to the maximum guarantee; for families with children, there are also limits on value of dwelling.	2018: EUR 5.6 million 2974 recipients EUR 7 000 average benefit for families with children	National/ Federal
Tax relief for home-owners	One-off fee reduction for registering property ownership	Eligible households (e.g. families with children who benefit from the state housing guarantee programme above) pay a reduced fee (0.5% of property value, rather than 2%) for registering ownership rights to immovable property in the land registry, provided that the value of the property is less than EUR 100 000.	No	Eligible to families with children who benefit from the state housing guarantee programme above.	2018: 2 974 recipients	National/ Federal
Housing allowance	Housing benefit *Dzivokla pabalsts*	Housing benefit for rental and housing costs. Housing benefit can be calculated based on the housing cost allocation and expenses defined by municipality, or using a fixed amount of benefit for person or household.	Yes	Housing costs and rules defining whether a family or a person is eligible to receive the benefit vary by municipality.	2018: EUR 14 903 585 82 986 recipients EUR 180 average annual benefit	Municipal
Social rental housing	Social housing/social apartments *(Socialo un pašvaldibas ires dzivoklu pieškiršana)*	A social apartment is owned or rented by a local government which is then rented to a household that is entitled to public support. A social house is a building in which all apartments are rented to households that are entitled to public support. A social house may also be a building owned by an association or foundation tailored for people with disabilities.	Yes	Priority to people who are victims of natural disasters, as well as to households that have been evicted and are: low-income, elderly, disabled, taking care of a dependent child/elderly or disabled person, and/or several other specific cases.	2018: [Budget not provided] 2016: 13 312 households	Municipal
Rental regulations	Minimum quality regulations for rental dwellings	Minimum quality regulations in place (lighting and ventilation, heating, hygiene and suitable for long-term human shelter and placement of household items)	No	None	--	National/ Federal

Source: Based on Latvia's responses to the 2019 OECD Questionnaire on Affordable and Social Housing (QuASH). (OECD, 2019[7]), Indicator PH1.1, www.oecd.org/els/family/PH1-1-Policy-instruments-levels-of-governance.pdf; Indicator PH2.1, www.oecd.org/els/family/PH2-1-Public-spending-support-to-home-buyers.pdf; Indicator PH2.2, www.oecd.org/els/family/PH2-2-Tax-relief-for-home-ownership.pdf; Indicator PH3.2, www.oecd.org/els/family/PH3-2-Key-characteristics-of-housing-allowances.pdf; Indicator PH4.3, www.oecd.org/els/family/PH4-3-Characteristics-of-social-rental-housing.pdf; Indicator PH6.1, www.oecd.org/els/family/PH6-1-Rental-regulation.pdf.

social housing stock is also very small (less than 2% of the total stock) in Luxembourg, Estonia, Lithuania and the Czech Republic; meanwhile, social housing is much more prevalent in the Netherlands (38% of the total housing stock), Denmark (21%) and Austria (20%) (OECD, 2019[7]), Indicator PH4.2). In light of the limited supply of social housing in Latvia, where available, apartments owned or leased by local governments are rented to low-income households that meet the eligibility thresholds set by the municipality. Box 3.2 and Table 3.3 provide examples of how other OECD countries set eligibility requirements for social housing.

As a result, based purely on household income and household size (without taking into account housing spending, tenure type, or other household characteristics), just under 30% of the population would be eligible to receive housing benefits. However, the coverage of households who actually receive the housing benefit in Latvia remains quite small: less than 7% of the total population in 2017, and just under 18% of the poorest households (e.g. those in the bottom income quintile). In other OECD countries, the share of poor households receiving housing benefits is much higher, reaching more than half of households in the bottom income quintile in Ireland, Finland and France, and between roughly 30 to 45% of households in the bottom income quintile in the United Kingdom, Iceland, Denmark and the Netherlands ((OECD, 2019[7]), Indicator PH.3.2).

Box 3.2: HOW DO OTHER OECD COUNTRIES SET ELIGIBILITY REQUIREMENTS FOR SOCIAL HOUSING?

Eligibility requirements and allocation criteria for social housing vary widely across the OECD. Latvia, along with Hungary, Lithuania, Spain and Portugal, has a very small social housing stock, whereby social dwellings are targeted to the most vulnerable households and allocated on the basis of need; the criteria to assess the level of "need" of a given household may vary across regions or municipalities, whereby different "vulnerable" groups are prioritised (e.g. the elderly, people with disabilities, victims of domestic violence, etc.). This differs from other OECD countries that may also have a very small social housing stock, yet allocate social dwellings to households that fall under an income threshold (Slovenia, Luxembourg) (European Parliament, 2013[45]).

The objectives, target groups and allocation criteria for social housing in selected OECD countries with a small social housing stock are summarised in Table 3.3. Nonetheless, allocation criteria can be designed very differently across countries:

- **Belgium** (Flemish region):
  - *Age:* the tenant must be at least 18 years old. Under-aged people can become tenants only under guidance of a professional service.
  - *Residence:* the tenant needs to have a permanent right of residence. Asylum seekers cannot be a tenant, for instance.
  - *Income:* the annual income threshold in 2019 was EUR 24 852 for a single person, EUR 26 934 for a single person with a disability, and EUR 37 276, increased by EUR 2 084 for every child or person with disability, for every other type of household.
  - *Property:* the tenant is not allowed to partly or fully own a dwelling or a parcel intended for residential construction. The tenant is also not allowed to be a manager, director or shareholder in a company in a dwelling or a parcel intended for residential construction.
- **Estonia:** There are two target groups for social housing under the programme, "The Second Residential Housing Development Programme of Tallinn City":
  - In the young family programme, eligible households are a family or a single parent raising at least one child under 16 years of age.
  - Workers essential to the City of Tallinn are the employees of nursery schools, elementary and primary schools, upper secondary schools, hobby education schools, vocational education schools and universities, social services, museums, libraries, theatres, mass transit, as well as nurses, midwives and caregivers working in healthcare companies and foundations, police officers, rescue workers and doctorate students.
- **The Netherlands:** Allocation criteria for social housing are designed as follows:
  - 80% of the new housing units developed by housing associations must be allocated to households with an annual income below EUR 38 035;
  - 10% of the new units may be allocated to households with an annual income between EUR 38 035 and EUR 42 436;
  - Housing associations may freely allocate the remaining 10%. However, if housing associations choose not to allocate the final 10% to households with an annual income below EUR 42 436, certain groups take precedence: households with problems related to health, security, social factors, force majeure or calamities.

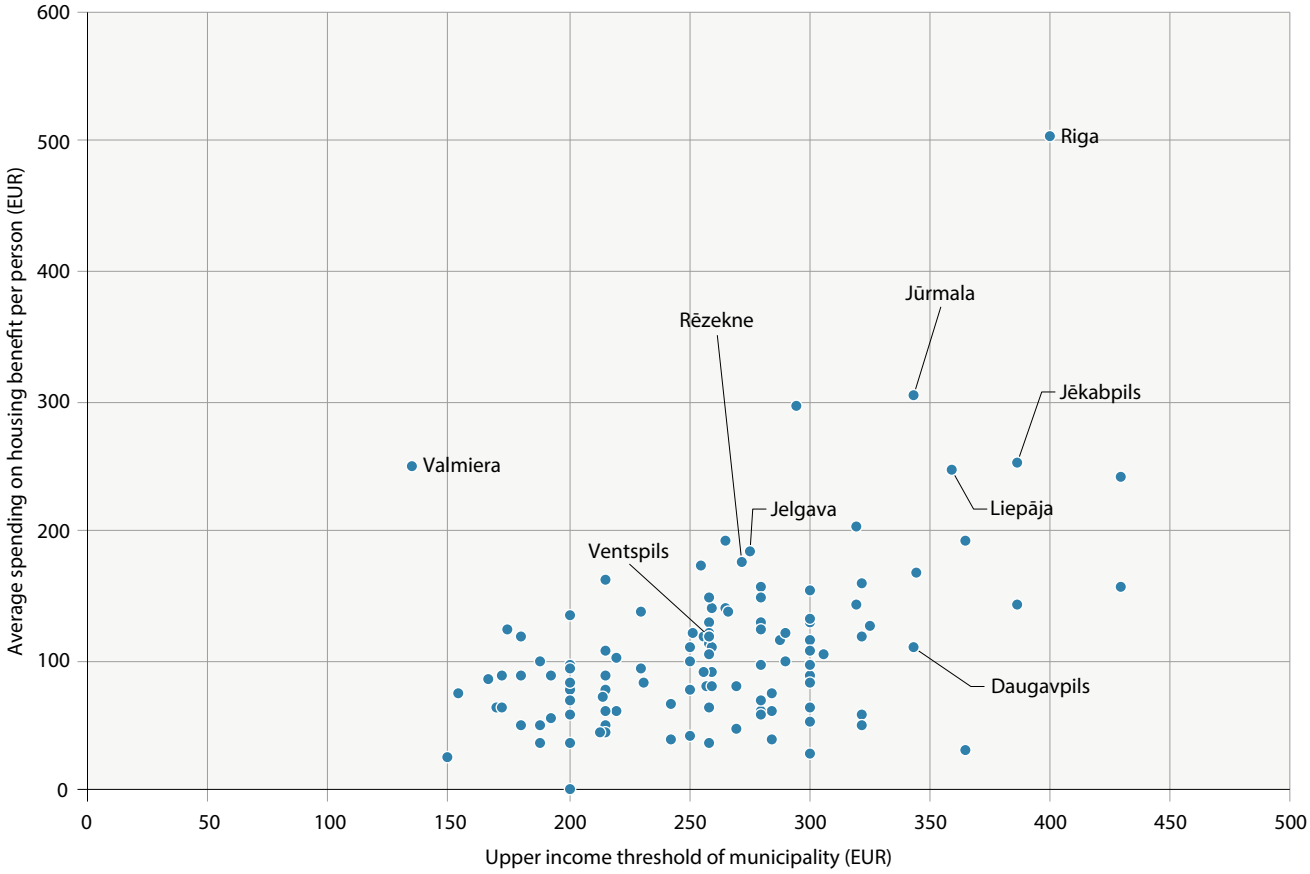
Source: (OECD, 2019[7]), Indicator PH4.3.

Table 3.3. **Criteria to access social housing in selected OECD countries**

Country	Objective of social housing	Eligibility	Income threshold?	Priority allocation
Countries with a small social housing stock (approx. 5-10% of total housing stock)				
Belgium (Flemish region)	Decent housing for low-income households	Income ceilings and no housing property (combined with the household size) & target groups	Yes	Additional priority criteria based on urgency of needs
Estonia	Housing people in need (vulnerable groups)	People with low income and no means to address their housing needs	No	Priority to young families and essential workers in the capital area (e.g. teachers, doctors, nurses)
Germany	Housing for people excluded from the housing market; providing middle and low income families with access to home ownership	Income ceilings decided by each regional authority (lander) and direct allocation by municipalities; requires legal residency of at least one year	Yes	Vulnerable households in greatest need
Ireland	Housing low-income people and disadvantaged groups	Income ceilings; must not have previous rent arrears; and there must be no suitable alternative accommodation available to the household	Yes	Social criteria to determine vulnerability
Italy	Social rental housing: housing low-income people; Social access to home ownership: housing the middle class	Income ceilings; occupational or residential link with the municipality; nationality		Point system based on housing conditions and number of dependent children
Countries with a very small social housing stock (less than 5% of social housing stock)				
Hungary	Housing for low-income people and vulnerable groups	No central regulation; usually income limits and restrictions on property ownership		No central regulation, but usually priority for families with children
Latvia	Housing for vulnerable and socially disadvantaged households	Low-income households	Yes	Priority to people who are victims of natural disasters, as well as to households that have been evicted and are: low-income, elderly, disabled, taking care of a dependent child/ elderly or disabled person, and/or several other specific cases.
Lithuania	Housing for people in need	Vulnerable groups	Yes	
Luxembourg	Housing for low-income people	Income ceilings; restrictions on property ownership	Yes	
Portugal	Housing and re-housing low-income people	Varies according to different programmes	No	Asylum seekers and refugee are eligible for social rental housing under the same terms as national citizens; there is also priority allocation for victims of domestic violence.
Slovenia	Housing for low- and middle-income people	Income ceilings (low income but still able to afford rents) and poor housing conditions	Yes	Additional social criteria
Spain	Housing for low-income households and people with special needs	Income ceilings; restrictions on property ownership		Disabled people and dependent persons; other priority criteria are established by local authorities

Source: Adapted from (European Parliament, 2013[45]); OECD QuASH; (OECD, 2019[7]), Indicator PH4.3.
In addition to support through social housing, households may also be eligible to receive a housing benefit *(Dzīvokļa pabalsts)*. Rules defining whether a household is eligible to receive the housing benefit vary by municipality (OECD, 2018[46]). Typically, eligibility for the housing benefit is defined in two stages. First, a family applies for the status of a "low-income family" *(maznodrošināta ģimene)*, then the benefit amount is calculated based on the family income and the actual housing expenditure (up to the maximum standard housing expenditure). Municipalities can individually set income thresholds for "low income families" at or above the nationally defined income threshold for a "poor family" *(trūcīga ģimene)* of EUR 128 per month. While the adjusted threshold varies across Latvian municipalities, the average (population weighted) adjusted threshold for housing benefits in 2018 was a monthly income of around EUR 264, with only a few municipalities setting a higher threshold of up to EUR 430 (Figure 3.4).

Figure 3.4. **Income thresholds and benefit levels of Latvia's housing benefit vary widely across municipalities**
Income thresholds and average annual spending per person, 2018



Source: Information provided by the Ministry of Welfare

Moreover, the amount of the housing benefit in Latvia remains very small, averaging less than EUR 15 per person per month (European Commission, 2019[1]). Using the housing benefit rules in Riga for 2018, a low-earning (10th percentile) family with one-earner and two children would receive housing benefits amounting to EUR 363 per year, equivalent to roughly 7% of their gross earnings (EUR 5 122 per year). In relative terms, this is less than half the average amount received by otherwise similar families in other OECD countries that provide housing benefits (15% of gross earnings). In many other OECD countries, the amount of the housing benefit received by low-income families represents a much larger share of household wages. In Ireland, Israel, Japan, Korea and Poland, low-earning (10th percentile) one-earner two-child couple families receive housing benefits worth at least 20% of their gross earnings ((OECD, 2019[7]), Indicator PH.3.3); refer to Table 4.2 in Annex B for a summary of eligibility criteria for housing allowances that are applied in a selection of OECD countries. In Latvia, the type of housing support may be in the form of a cash housing allowance for low-income households, discretionary emergency benefits, but can also be provided as in-kind support (e.g. firewood for heating).

In sum, the two main housing instruments that target low-income households in Latvia present several challenges. First, while the measures effectively reach those among the neediest households, the share of potential beneficiaries is comparatively small, given the low income threshold. For instance, in 2015, there were about 109 social housing multi-unit buildings in Latvia for a total of 3 413 apartments, with an estimated 7 000 people on the waiting list (European Commission, 2019[47]). Second, for those who receive such support, the measures are not necessarily sufficient to ensure access to quality, affordable housing. Following the phasing out of state-funded grants for social housing in 2009, local governments, with few exceptions, have invested little to expand the supply and improve the technical conditions of social dwellings, resulting in quality deficiencies and housing that "is not always fit for living" (European Commission, 2019[47]). In the case of

housing benefits, the amount of housing support provided by municipalities is low, and is allocated in relation to municipal budgets, rather than with respect to the level of households' material needs (OECD, 2016[48]). This can help explain why just under a quarter of households in the lowest income quintile are overburdened by housing costs, and are most likely to live in housing of substandard quality (Section 2.2).

Support for higher-income households: Mortgage guarantee

A second set of measures aims to facilitate access to home ownership among families and young specialists (who are defined as people under age 35 who have acquired vocational secondary or higher education). The main instrument is a state guarantee for the first instalment of a loan to purchase or build a home, which is intended to support individuals with a regular income but insufficient savings for a down-payment. Government guarantees lower the perceived risk of affordable housing investments to those loaning money. As a result, borrowers can offer lower interest rates and still attract investors. In turn, lower interest rates mean affordable housing developers can provide more stock to targeted lower and moderate income households. Government guarantees are one strategy to correct market failure in providing sufficient housing for these households (Lawson et al., 2014[49]). A second support measure is available to families with children who benefit from the state guarantee, in the form of a reduced rate of the fee to register the ownership rights to the property in the Land Register. The aim of the reduced fee is to help drive down the necessary down payment for families with children.

The state guarantee, which is managed by the state-owned development finance institute, ALTUM, was first introduced by the government in 2014 and restricted to families with children; in 2017, it was extended to young professionals. Families with children (who are up to 23 years old) may be granted a guarantee for up to 10 years; the guarantee varies between 10 to 20% of the value of the loan, depending on the number of children in the family, with a maximum guarantee of up to EUR 20 000 and a maximum value of the dwelling of EUR 200 000. As a complement to the guarantee, families with children who receive the guarantee are eligible to pay a reduced fee for registering property ownership (0.5% of property value, rather than the standard 2% rate), so long as the value of the property is less than EUR 100 000. Young specialists can receive a guarantee up to 10 years, with a maximum guarantee of 20% of the value of the loan (up to EUR 50 000), with no restriction on the value of the dwelling. Young specialists are obliged to pay market-rate guarantee fees (unlike families with children, who pay a reduced rate).

Beyond the eligibility requirements relating to household characteristics, beneficiaries of the state guarantee programme must first have a sufficient income to qualify for a commercial loan. As a result, the programme benefits higher-income households. Over the first four years of the programme, around 11 000 families received a mortgage guarantee, including nearly 16 000 children – representing just over 1% of all Latvian households. The average guarantee size is around EUR 7 000, for an average mortgage of around EUR 64 000. Most dwellings purchased with the mortgage guarantee have been two-bedroom apartments in existing multi-unit buildings. Around two-thirds of the guarantees have been allocated to families with one child, and a similar share has gone to households living in and around Riga. Meanwhile, more than 1 000 guarantees have been provided to young specialists. The programme is dependent on the annual government budget allocation, which in 2018 was around EUR 5.6 million; guarantees are allocated to eligible households on a first-come, first-serve basis.

Nevertheless, while the mortgage market remains relatively small in Latvia, there are some concerns about the potential financial risks associated with the state guarantee scheme over the long term. The lending policies of commercial banks and credit institutions has remained relatively cautious in the years since the global crisis (Latvijas Banka, 2019[50]). On the one hand, the mortgage guarantee programme has helped to revitalise the mortgage market. On the other hand, however, the programme also exposes Latvia to greater financial risk over the longer term. Roughly half of all new loans to purchase a home in Q4 2018 and Q1 2019 benefited from a state guarantee, representing a sizeable share of the mortgage market and a potentially significant liability should another housing bubble materialise (Latvijas Banka, 2019[50]). Moreover, more than a quarter of loans have a LTV ratio that exceeds 90%, a share that has increased over time (Latvijas Banka, 2019[50]). Means-testing could be introduced to ensure that state guarantees provide support to those who otherwise would not be able to access a credit, whilst avoiding overconsumption of housing (i.e. enabling households who could afford to purchase a home without the state guarantee to simply purchase larger homes).

The "missing middle": Households who are ineligible for housing support and unable to afford a commercial mortgage

The system of current housing supports in Latvia means that a large share of the population is too rich to qualify for social housing or the housing benefit, and too poor to afford a commercial loan to purchase a decently-sized dwelling – a "missing middle" that is not adequately served by either public supports or the private sector.

As an illustration, Figure 3.5 (Panels A, B and C) indicates the share of households that are neither eligible for housing support nor able to afford to buy an apartment without spending more than 30% of their income on housing costs, for three different types of households: single-person households, two-adult no-child households, and two-adult two-child households. These household types make up, respectively, 36%, 14% and 7% of all households in Latvia (Table 3.4). The mortgage affordability assessment is based on the mortgage needed to purchase a 75m^2 at the average transaction price for existing apartments in Riga (EUR 900 per m^2), and considers only whether total housing costs (mortgage payments plus utility payments and maintenance) would consume more than 30% of the household's after-transfer disposable income. Households would need a disposable income of at least EUR 17 100 in order to be able purchase this apartment without spending more than 30% of income on total housing costs. To recall, around 73% of Latvian households (around 600 000 households) do not have a disposable income of at least EUR 17 100 (Figure 2.6).

It should be noted that these estimates rely on a range of assumptions that affect the resulting size of the "missing middle." For example, as highlighted above, the mortgage affordability assessment is based on the average transaction price for existing apartments in Riga, as reported by Latio (Latio, 2019[17]). Given that a large share of the existing housing stock in Riga is Soviet-era, the estimates shown in Figure 3.5 reflect in large part the ability of households to purchase Soviet-era dwellings. Renovated, more modern, and new-build apartments typically sell for higher prices, so an assessment that accounts for these more modern apartments would result in an even larger "missing middle."

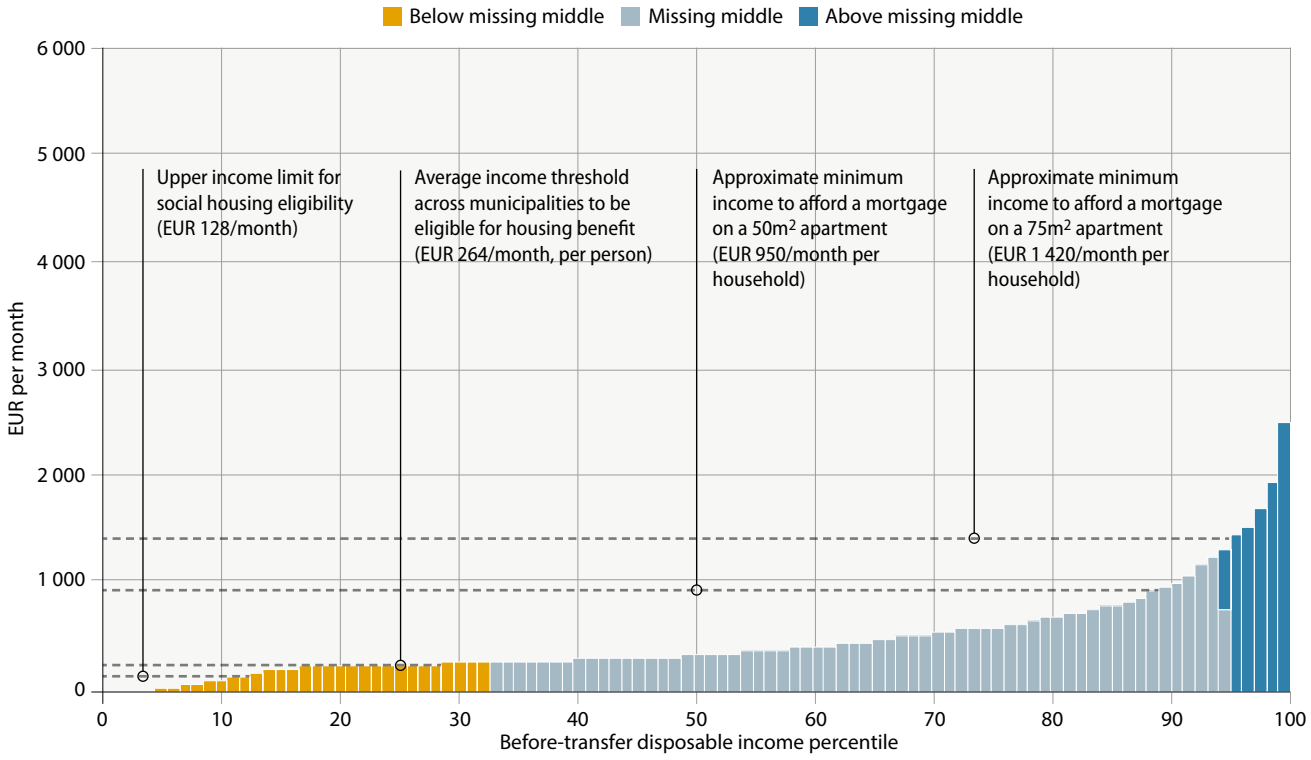
A second important assumption is that mortgage affordability is assessed here only by whether a household can afford a mortgage without spending more than 30% of disposable income on total housing costs – a common threshold for an acceptable share to be dedicated towards housing (Gabriel et al., 2005[13]), and a threshold used by some commercial lenders in Latvia to assess mortgage affordability (SEB, 2019[14]). Commercial lenders may of course use many other criteria to assess mortgage applications, including age, household composition, credit history and existing debt obligations. These criteria are not taken into account here. However, Figure A C.3 in Annex C provides alternative results that account for one additional criteria – a residual income of EUR 300 per person, per month, after mortgage costs. Overall effects on results are small, although the inclusion of a residual income test does have some impact on the size of the missing middle among two-adult, two-child households.

The estimated size of the missing middle varies with household composition. At the low end of the income distribution, the share of households that meet the income criteria for housing support differs considerably across different types of household. Among both single-person households and two-adult two-child households, all households in the bottom quintile of the income distribution (bottom 20%) plus around half to two thirds of those in the second quintile are likely to be eligible for social housing and/or the housing benefit – although, as discussed, the share of the population who actually receives these supports is lower. Among two-adult no children households, only the bottom 20% or so meet the criteria for income support. Table 3.4 summarises the age distribution of the population by household type.

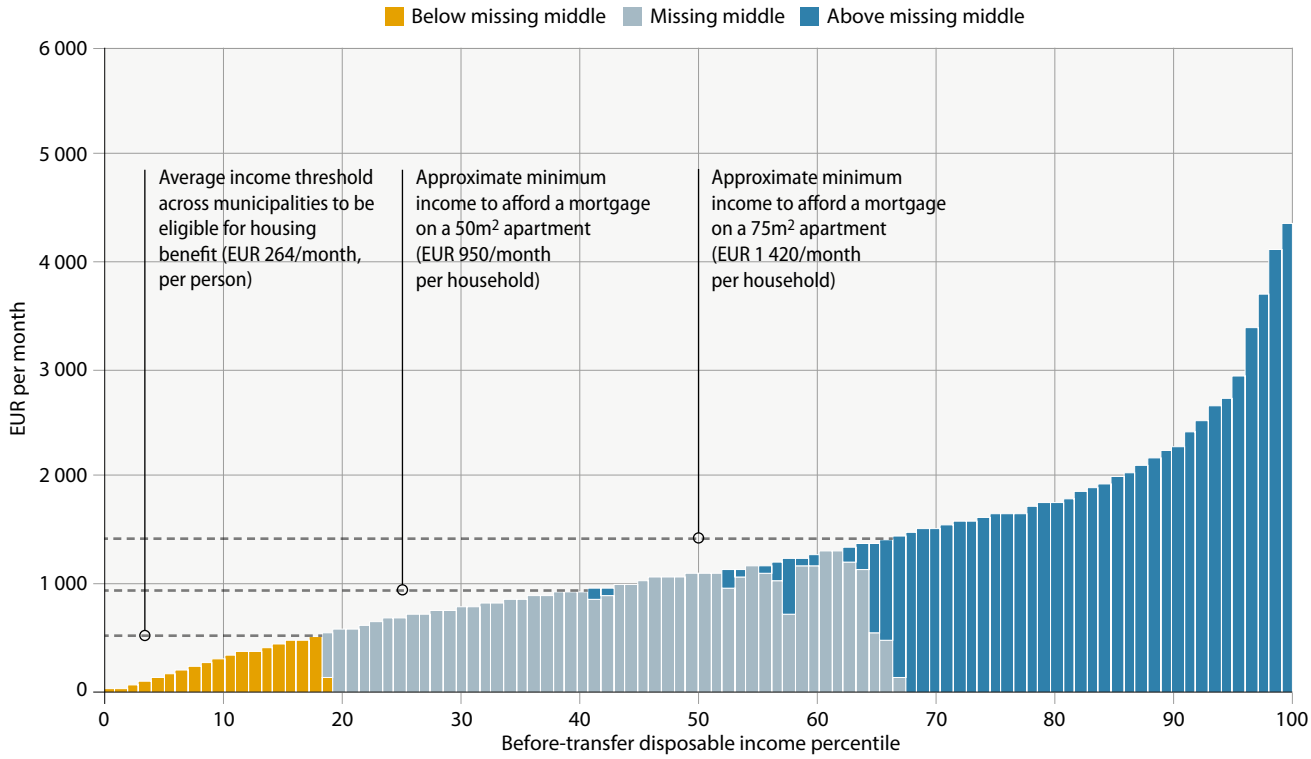
At the other end of the income spectrum, the share that have sufficient income to afford a mortgage also differs across households types. Single-person households are the least likely to be able to afford a mortgage; only around 10% would be able to access a commercial loan to purchase a 50 square meter dwelling without spending more than 30% of their income on a mortgage plus utilities and maintenance, and just the top 6% could afford a mortgage on a 75 square meter dwelling. In contrast, about 36% of two-adult nochildren households would be able to purchase a 75 square meter dwelling without spending more than 30% of disposable income on mortgage payments and utilities and maintenance, as would more than half (54%) of two-adult, two-child households. To a large extent, this reflects the relatively high incomes enjoyed by two-adult households (both with and without children), even after income is adjusted for the number of people in the household (see section 2.2 and 4.6.Annex C). Still, the fact that almost half of two-adult, two-child households *cannot* afford the mortgage on a 75m^2 dwelling should not be downplayed.

Figure 3.5. **Access to housing instruments: Illustration for different household types**
Illustrative examples of access to housing instruments and the "missing middle" in Latvia, by before-transfer disposable income percentile and household type, 2018

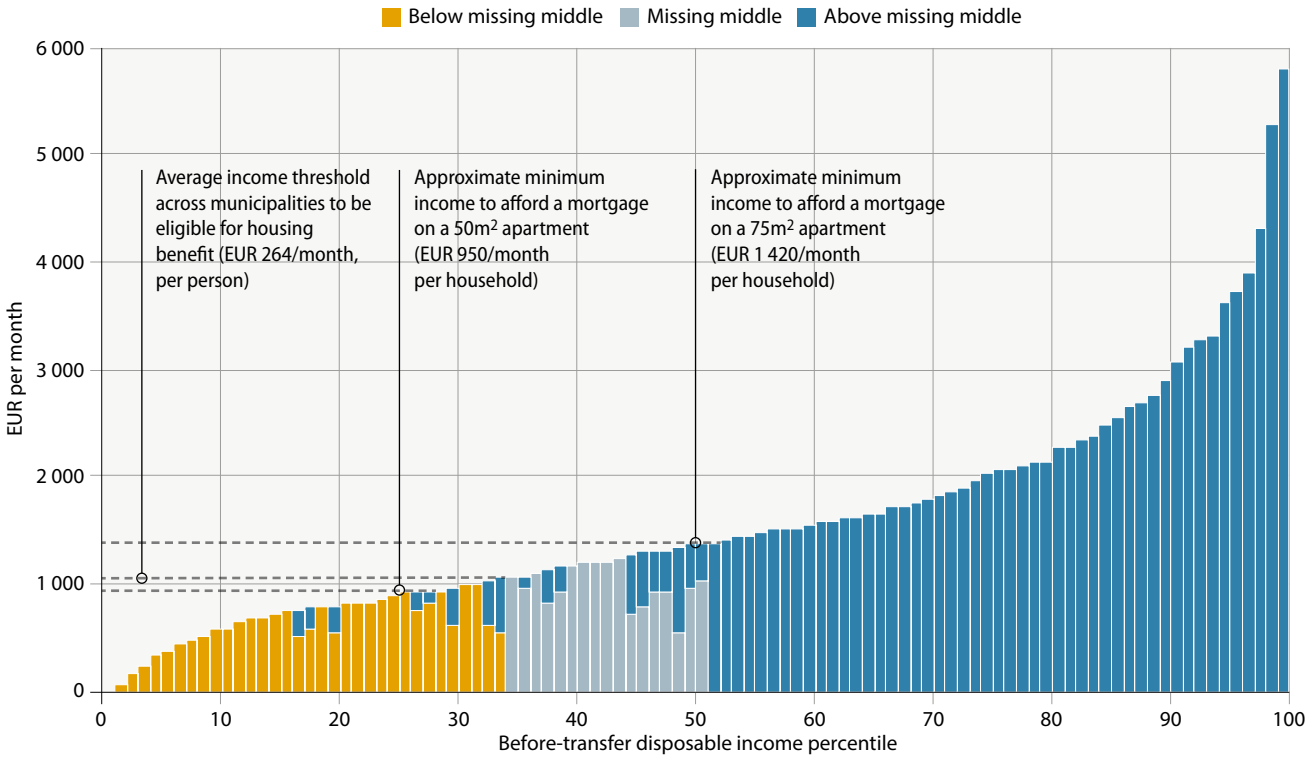
Panel A. Single-person households



Panel B. Two-adult, no-child households (both under 65)



Panel C. Two-adult, two-child households



Note: "Can afford a mortgage" means that equivalised total housing costs (including utilities and maintenance) consume less than 30% of total equivalised after-transfer household disposable income. Estimates based on the average transaction price for apartments in Riga (EUR 900 per m^2). The "missing middle" are those who are not eligible for housing benefit and cannot afford a mortgage on a 75m^2 apartment. For more information on the calculation of the affordability thresholds, see Figure 2.6 in Section 2.2.1. Average income threshold across municipalities in order to be eligible for housing support is weighted by population size of the respective municipalities. Across municipalities, this threshold can range between EUR 128 and EUR 430. Note that the figure is illustrative only; in particular, please note that mortgage affordability is determined using after-transfer disposable income, while the figure uses before-transfer disposable income as its scale.

(1) For Panel C, the affordability of the 50m^2 apartment is included for consistency; however, given that 50m^2 would not be sufficient for a household with two adults and two children, the affordability simulation for this household type is based only on a mortgage for a 75m^2 apartment.

Source: OECD estimates based on the European Union Statistics on Income and Living Conditions (EU SILC) survey, Latio Residential Report: 1st Half of 2019 (http://latio.lv/en/services/market-analysis-and-review-1/housing-market), Bank of Latvia Interest Rate Statistics (www.bank.lv/en/statistics/stat-data/interest-rate-statistics), and information from the Ministry of Economy.

Table 3.4. **Age distribution of the population, by household type**

Distribution of the population in households, by household type, by age group, Latvia, 2018 (%)

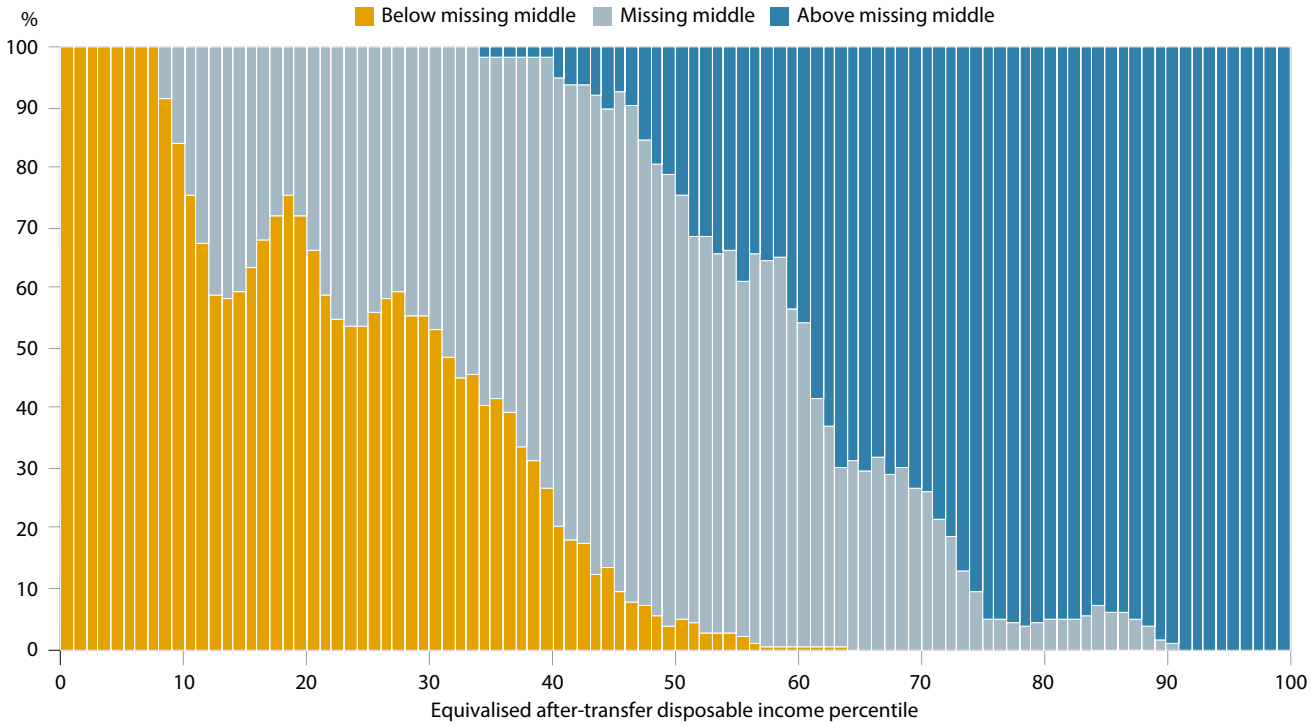
Household type	below 15	15-29 year-olds	30-64 year-olds	65+ year-olds
Single person household	0.0	6.7	43.1	50.2
Households without children				
Two adults, no children, both under 65	0.0	17.2	82.8	0.0
Two adults, no children, at least one 65+	0.0	1.3	24.9	73.7
Other households without children	0.0	21.8	58.4	19.9
Households with children				
Single parent, at least one child	38.6	23.3	37.5	0.6
Two adults, one child	24.0	20.8	53.5	1.7
Two adults, two children	40.6	13.8	45.0	0.6
Two adults, three or more children	50.3	15.1	34.4	0.2
Other households with children	21.3	25.6	42.4	10.6
Other	6.0	38.6	48.6	6.8

Note: Values represent the distribution of the population within each household type. For example, within people living in single-person households, 6.7% are 15-29 year-olds, 43.1% are 30-64 year-olds, and 50.2% are 65+ year-olds.

Source: OECD estimates based on the European Union Statistics on Income and Living Conditions (EU SILC) survey.

Figure 3.6. **The "missing middle" includes people across the income distribution, with most falling into the second and third income quintiles.**

Distribution of population by missing middle status, by equivalised after-transfer disposable income percentile, five-percentile moving average, 2018



Note: The "missing middle" are defined as those that live in households that are not eligible for housing benefit and cannot afford a mortgage on a 75m^2 apartment. People categorised as "below missing middle" are those in households that are eligible for housing benefit. People categorised as "Above missing middle" are those in households that are able to afford a mortgage on a 75m^2 apartment. Eligibility for housing benefit is set at a maximum before-transfer household income per person of EUR 264 per month - the weighted average income threshold across municipalities. "Can afford a mortgage" means that equivalised total housing costs (including utilities and maintenance) consume less than 30% of total equivalised after-transfer household disposable income. Estimates based on the average transaction price for apartments in Riga (EUR 900 per m^2). For more information on the calculation of the affordability thresholds, see Figure 2.6 in Section 2.2.1. Equivalised after-transfer disposable income is calculated based on information from EU-SILC. Due to limited sample sizes, the estimated share of people below, in, or above the missing middle fluctuates slightly across percentiles.

Source: OECD estimates based on the European Union Statistics on Income and Living Conditions (EU SILC) survey, Latio Residential Report: 1st Half of 2019 (http://latio.lv/en/services/market-analysis-and-review-1/housing-market), Bank of Latvia Interest Rate Statistics (www.bank.lv/en/statistics/stat-data/interest-rate-statistics), and information from the Ministry of Economy and Construction.

In total, looking across all household types, the "missing middle" covers around one-third of the population in Latvia and represents around 44% of all households, spanning much of the income distribution. It includes at least some people from around the 10th through to roughly the 90th percentiles of the equivalised after-transfer disposable income distribution. Most of the "missing middle" are concentrated between the 20th and 60th percentiles of the income distribution – in other words, in lower-middle and middle-income households (Figure 3.6). The relatively small share of high-income households (80th percentile and above) that find themselves in the missing middle are typically one- or two-person households. These households fall into the missing middle because, in Latvia, even a relatively high single income is not sufficient to afford the assumed mortgage.[2]

Several groups are more likely to find themselves in the "missing middle" (Table 3.5). These include households in the second and third quintiles (who fall above the income threshold to qualify for the housing benefit); single-parent and elderly households; and households in the private rental market as well as owner-occupiers:

- ***By equivalised after-transfer income:*** Nearly 67% of households in the second income quintile and 83% of households in the third income quintile fall into the "missing middle." Affordable housing options for these households are limited, in light of the underdeveloped rental market and their inability to afford to buy a home without spending more than 30% of their income on housing costs. More than a quarter (26%) of households in the first income quintile *also* fall into the missing middle, suggesting that there could be scope

to adjust the eligibility threshold for "needy persons" upwards, in order to provide a broader segment of the low-income population with housing support.

- ***By household type:*** Around 62% of single-person households fall into the "missing middle". Further, 42% of single-parent households with dependent children and just under half of "other households" (which include couples without dependent children, elderly couples, as well as housing shares, e.g. roommates) also fall into the missing middle. Households with children are less likely than others to find themselves in the "missing middle". Still, almost one-in-five (18%) two-adult-with-children households fall into the missing middle.

- ***By tenure:*** Almost 43% of renters in the private rental market as well as nearly 46% of outright owners and 28% of owners with a mortgage fall into the "missing middle". This has multiple implications. First, it again underscores the limited public support available to renters in Latvia, particularly those who do not have the income levels to afford a commercial mortgage but nonetheless remain constrained by an underdeveloped private rental market; it could thus prove highly beneficial for Latvian policy makers to envisage ways to expand the rental market. Second, with respect to the large share of owner-occupied households in the "missing middle", households who already own a home do not require significant public support to acquire housing; rather, in light of the assessment of the quality of the housing stock, owner-occupied households would be more likely to benefit from support for dwelling maintenance and upgrades.

- ***By age:*** Just over half of people aged 65 and over fall into the "missing middle", as do around 33% of the population aged 30 to 64 and a quarter of people aged 15 to 29. The large share of seniors, who are most likely to own their homes outright, suggests that they, too, may benefit from support to upgrade their dwellings, thus leading to an improvement in the overall quality of the housing stock.

- ***Young specialists:*** Just under a quarter of young specialists fall into the "missing middle"; meanwhile, around two-thirds of young specialists are above the missing middle and thus able to afford a commercial mortgage without spending more than 30% of their income on housing costs.

To be clear, not all households should receive public support for housing, and many other countries also have a "missing middle" of households who, based on their income level, do not qualify for public support for housing. Indeed, low-income households across the OECD are often supported by social housing and housing benefits, whilst higher-income households may receive a number of different supports to access home ownership (see OECD 2020 forthcoming). However, there are several challenges for households in the "missing middle" in Latvia. The first is that the housing market lacks affordable rental housing alternatives that would typically be available to lower- and lower-middle income households who may not be able to afford a mortgage to purchase a home. The second is that, as we have seen, the large share of homeowners (who are ineligible for existing housing support) live in housing of poor quality and are not able to afford the costs associated with maintenance or upgrades.

Apartment buildings in Riga.

Table 3.5. **Who are the "missing middle"?**
Distribution of households and the population by missing middle status, by household and population characteristics, Latvia, 2018 (%)

			Below missing middle	Missing middle	Above missing middle
Share of households	**All households**		**29.6**	**43.6**	**26.8**
	By household type	Single person household	33.0	61.6	5.4
		Single parent with dependent children	47.9	42.1	10.0
		Two adults with dependent children	27.5	17.9	54.6
		Other households with dependent children	27.2	5.8	67.1
		Other households	25.1	44.1	30.8
	By tenure	Own outright	29.5	45.6	24.9
		Owner with mortgage	11.9	28.1	60.0
		Rent (private)	31.3	42.6	26.1
		Rent (subsidized)	50.8	35.5	13.6
		Other, unknown	35.5	49.0	15.6
	By equivalised after-transfer income level	First quintile	74.0	26.0	0.0
		Second quintile	33.1	66.8	0.1
		Third quintile	5.5	83.3	11.2
		Fourth quintile	0.3	39.0	60.7
		Fifth quintile	0.1	6.9	93.0
Share of population	**Total population**		**28.7**	**32.8**	**38.5**
	By age group	Below 15	32.2	15.5	52.3
		15-29	26.8	25.1	48.0
		30-64	25.7	32.9	41.5
		65+	34.5	50.7	14.7
	By young specialist status	Not a young specialist	30.2	33.5	36.3
		Young specialist	9.9	23.6	66.5

Note: The "missing middle" are defined as those that live in households that are not eligible for housing benefit and cannot afford a mortgage on a 75m^2 apartment. People categorised as "below missing middle" are those in households that are eligible for housing benefit. People categorised as "above missing middle" are those in households that are able to afford a mortgage on a 75m^2 apartment without spending more than 30% of their household disposable income on total housing costs (including utilities and maintenance). Estimates based on the average transaction price for apartments in Riga (EUR 900 per m^2). The effective income threshold for the "above missing middle" category is a (non-equivalised) after-transfer household disposable income of EUR 17 100 for all household types. Eligibility for housing benefit is set at a maximum before-transfer household income per person of EUR 264 per month - the weighted average income threshold across municipalities. "Young specialists" are defined as people aged 34 or under with upper-secondary vocational education or tertiary education. For more information on the calculation of the affordability thresholds, see Figure 2.6 above.

Source: OECD estimates based on the European Union Statistics on Income and Living Conditions (EU SILC) survey, Latio Residential Report: 1st Half of 2019 (http://latio.lv/en/services/market-analysis-and-review-1/housing-market), Bank of Latvia Interest Rate Statistics (www.bank.lv/en/statistics/stat-data/interest-rate-statistics), and information from the Ministry of Economy and Construction.

Right: Aerial view of Riga suburbs

New residential building at Skarnu Street, Riga.

4. Looking ahead: Policy directions to boost housing affordability and quality in Latvia

This chapter explores a series of policy directions to make housing more affordable in Latvia. First, it will be important that the Latvian authorities invest more in good quality housing; this includes investments to upgrade the existing housing stock, as well as to construct new housing. Second, the chapter explores strategies to develop a more affordable, attractive private rental market as a means to provide more affordable housing options to households who do not qualify for social housing but who cannot afford to buy a home. Third, it discusses potential measures to expand support for middle-income families to buy a home. Finally, it looks at the issue of construction and development costs, drawing on international experience.

Making housing more affordable will require a coherent policy package, as well as a long-term effort, with broad-based political consensus to move forward. In addition, the strategy should be smart and innovative in the promotion of new housing policies and in the selection of implementation tools. To this end, possible applications of behavioural insights could be explored as a way to complement and enhance the effectiveness of the selected housing interventions (Box 4.1).

INVESTING MORE IN GOOD QUALITY AFFORDABLE HOUSING

Addressing the challenges of housing affordability and quality in Latvia will require a boost in housing investment in the coming years. Investment in housing in Latvia has been low over the past decades for a number of reasons, including *inter alia*, limited housing demand resulting from the global financial crisis, low household incomes, the large shadow economy (which includes undeclared wages among households), as well as lengthy construction regulations and regulatory barriers in the rental market (discussed further below).

Guided by the development of a comprehensive housing strategy, the Latvian authorities can help to narrow the housing affordability and quality gap by investing more to provide targeted support to households in need, to improve the quality of the existing stock, and to increase the supply of new affordable housing. Taking a long-term view to investing in housing, for example through the establishment of a special-purpose fund financing new construction and upgrades of the housing stock, would help spread resource requirements over a number of years and better manage the fiscal impact of any intervention. Developing a financial instrument to support investment in affordable rental housing projects, as well as upgrading the existing housing stock will be key for Latvia. Interventions aimed at renovating residential buildings can provide significant savings in terms of household spending on energy use and promote a more efficient use of resources with a positive environmental impact.

Further, there are indications of high demand for affordable rental housing in Latvia, based on the successful development in the city of Valmiera. In this case, the municipal housing management company developed 150 rental units in multi-apartment dwellings. As these units were developed on subsidised public land without market expectations on returns on investment, they could be rented out at around EUR 4/m^2, roughly EUR 4/m^2 below market value. The units rented out quickly, demonstrating the potential of affordable rental housing as a policy tool to attract people to the municipality and providing employees to local businesses. However, the Valmiera experience also suggests that affordable rental development is only viable if cheap long-term financing is available (European Commission, 2019[47]), with the additional benefit in the case of Valmiera that the units were developed on subsidised public land. In addition, the rental units developed under this scheme were still not affordable for those on very low incomes; this model thus would not solve the affordability challenge for all Latvian households.

In parallel, it will be equally important to design financial instruments that support the upgrading and renovation of existing dwellings. Improvements in the housing

stock could create a virtuous cycle where better quality apartments could eventually enter the rental or property market. It will be important to undertake a comprehensive assessment of the current state of the housing stock to evaluate the scale and depth of upgrades that would be required, and the cases for which refurbishments would *not* be the most cost-effective approach.

Revolving funds are used by many countries to finance affordable and social housing (for example, Austria and Denmark), as well as for the maintenance and upgrading of existing buildings (the Slovak Republic). Such funds can provide the cheap long-term financing that would be needed in Latvia to address the affordability and quality gaps. These instruments can finance and support social housing through loans, mixing state-guaranteed loans and market loans. In Austria, for example, housing developments financed through housing associations' revolving funds have access to public loans (with 35-year maturities, 0.5-1.5% interest rate) and private loans with a maturity period of 25 years on average (on average 1.5% interest rate), which is longer than the maturity that could be obtained by a for-profit organisation (see below section on facilitating the emergence of new types of housing developers and alternative tenure arrangements).

The establishment and design of the fund would need to be carefully evaluated to ensure appropriate use of public resources, guarantee fiscal sustainability over the long term and fall within the parameter of EU State Aid rules (Box 4.2). The actual size of the fund would depend on the scope and type of investment to be financed, as well as on contextual factors such as land prices and construction and maintenance costs. Taking an

Box 4.1: **DEVELOPING EFFECTIVE HOUSING STRATEGIES THROUGH BEHAVIOURAL INSIGHTS**

Mistaken assumptions about households' preferences can significantly undermine housing interventions. By incorporating insights from psychological, cognitive and social sciences, behavioural insights (BI) can provide an effective **framework for characterising the choices and mistakes that households make in complex environments**. For example, BI can explain why housing prices and rents are sometimes inflated, or depressed, due to biases unrelated to market supply and demand forces, such as perceptions and opinions about communities.

Even more importantly, BI can serve as an **analytical lens for explaining the failure of traditional housing policies**. For example, BI has been used to understand why housing vouchers alone fail to promote mobility of low-income households (Hall, 2014[51]) and why risk-reduction policies fail to change the construction preferences of residential developers despite all the advantages conferred to promoted locations through various policies (Rayman, 2006[52]).

However, evidence indicates that, when these housing interventions are coupled with **intensive counselling, targeted communication, programmatic support and innovative policy features**, they can effectively help families and communities make better choices (Hall, 2014[51]). For example, preliminary studies have shown the effectiveness of BI in addressing issues such as reducing rent arrears in social housing as well as increasing rates of contact between mortgage lenders and customers facing arrears (BIT, 2018[53]).

This seems to be **highly relevant in the context of Latvia**, as exemplified by the success of the EU-funded 'Let's live warmer' information campaign (Informēšanas kampaņa "Dzīvo siltāk"), developed to promote energy efficiency of buildings throughout the country. Through a multifaceted approach, including education seminars, conferences, information events and special guidance materials on energy efficiency, the campaign proved successful in raising awareness about the funds available for apartment renovation, having contributed to the completion of 740 projects over its imple¬mentation between 2009 and 2013 (European Commission, 2018[54]).

Building on this example, Latvia should continue to work on communicating effectively about desired policy outcomes and **experiment with innovative ways to further promote renovation, reconstruction works and purchase and installation of high-efficiency technology**, for example by leveraging framing and social norms in communications on existing and planned sustainability programs, and by creating effective incentives to increase uptake.

Indeed, the power of an **experimental and behavioural approach to housing policies** is a key lesson learnt from numerous similar projects throughout the EU. For instance, in Lithuania, the experience from the Residential Energy Efficiency Program also pointed at the importance of starting by testing small administrative and delivery mechanisms, and only subsequently scaling up successful approaches to support collective decision-making (World Bank Group, 2014[55]).

Similarly, research on EU-funded "SINFONIA" retrofit interventions in Italy, showed that accounting for social and individual levers can determine the success or failure of behaviour change strategies to drive efficient **energy behaviours in social housing contexts** (DellaValle N., 2018[56]). For instance, the study recommended housing strategies aimed at removing context-specific cognitive and social biases, such as sending reminders for a particular future action or installing a monitor displaying information on aggregate future benefits from ventilating or heating spaces more efficiently.

incremental approach would be wise so that the capacity and funding priorities could be built up over time. There are different ways to structure such a fund; the cases of the Slovak Republic, Denmark and Austria could be relevant models to consider. Building the capacity to manage such a fund would be essential.

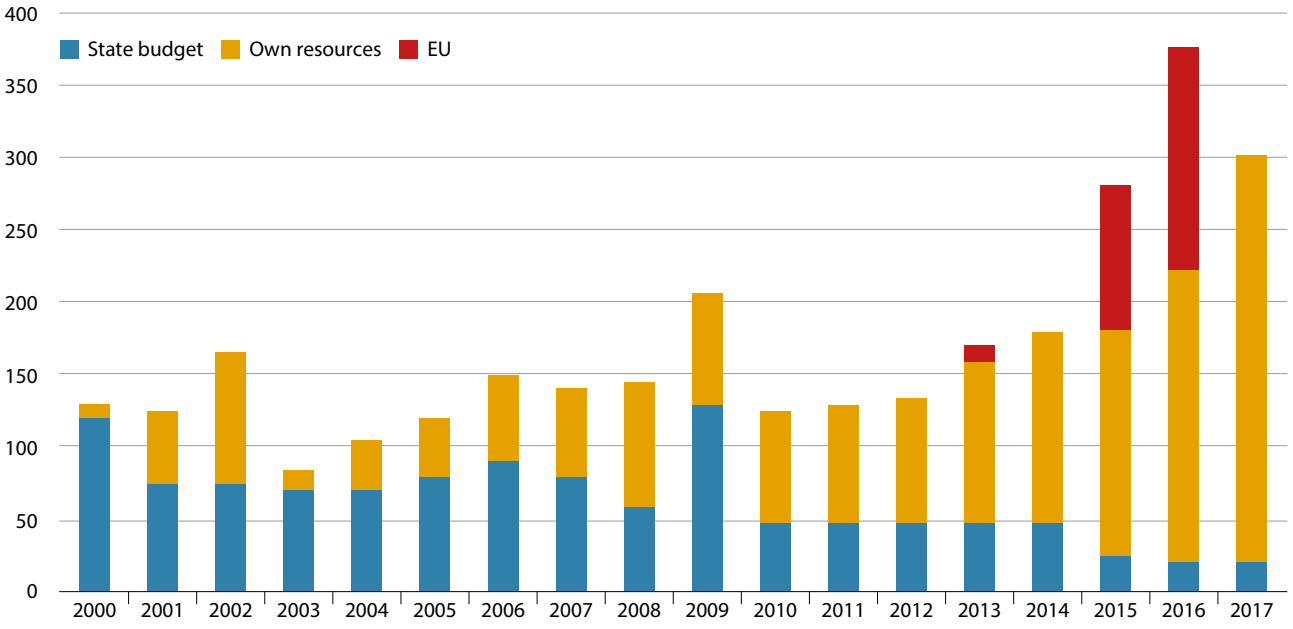
The Slovak Republic's State Housing Development Fund and National Housing Strategy

The Slovakian experience is particularly interesting as the housing fund is linked to a national housing strategy that helps guide investment in construction, upgrading and maintenance over the medium- to long-term.

After the Communist period and following the withdrawal of the State from the housing market, there was a significant fall in housing construction in the Slovak Republic. To respond to this challenge, in the early 1990s, central and local governments re-assessed their role in supporting housing. While the key principle is that housing is an individual responsibility, the State Housing Strategy aims at supporting improvements in housing standards through: i) public rental housing to support accessibility and affordability; and ii) modernisation of the existing housing stock (including addressing technical failures).

The State Housing Development Fund, introduced in 1996, is a key tool in supporting the expansion of property and rental housing and improvements to housing quality. The Fund provides favourable long-term loans, financing up to 100% of acquisition costs for a term of up to 40 years with differentiated interest rate ranging from 0% to 3%. Loans can be accessed by individuals, local governments and not-for-profit organisations. For individuals, the monthly income of the applicant and the persons whose income is assessed should not exceed four times the subsistence level of the household, as of 2019. Eligible apartments cannot exceed 80 square meters (160 square meters for family houses). The Fund also helps to finance the acquisition of rental dwelling as well as the renewal/upgrades of residential buildings. Construction of dwellings for which a loan is provided needs to be completed with 24 months from the date in which a loan is granted (State Housing Development Fund, 2019[57]). Over time, the Fund has become self-sufficient and also attracted EU structural funds, and thus has progressively reduced the contribution of the State budget to housing. The State Housing Development Fund was initially funded almost entirely through the state budget and has progressively become almost self-funded while doubling the initial capital (Figure 4.1).

Figure 4.1. **Sources of funding for the State Housing Development Fund (Slovak Republic)**
EUR



Note: own resources are primarily loan repayments.

Source: Presentation of Elena Szolgayova, Director General, DG Housing Policy and Urban Development, Ministry of Transport and Construction (Slovak Republic) at the occasion of the OECD Expert Workshop on Affordable Housing in Latvia, 5-6 November 2019, Riga, Latvia.

Table 4.1. **Refurbishments of the housing stock in the Slovak Republic**
As of end-2016

	Dwellings in residential buildings	Family houses	Total
2011 Census	931 605	1 008 795	1 940 400
Refurbished dwellings	543 406	378 271	921 677
Share of refurbishments	58.33%	37.5%	47.5%

Source: Presentation of Elena Szolgayova, Director General, DG Housing Policy and Urban Development, Ministry of Transport and Construction (Slovak Republic), at the occasion of the OECD Expert Workshop on Affordable Housing in Latvia, 5-6 November 2019, Riga, Latvia.

To complement the Fund, a housing development programme, introduced in 1998, provides subsidies to municipalities to finance i) the construction of social rental housing; ii) the construction of technical infrastructure; and iii) the elimination of systematic technical failures in building construction. Depending on the building features and quality standards, the subsidies to municipalities can cover between 40 and 75% of the acquisition costs.

In particular, in recent years the Slovak State Housing Development Fund has been effective in funding maintenance and refurbishments. As of 2016, approximately half of the country's dwelling stock had been refurbished. Of those, half (or 25% of the total housing stock) have been refurbished with the support of the Fund, which is currently focusing its activities on upgrading the housing stock (Table 4.1). The Ministry of Transport and Construction, which manages the Fund, has been very active in engaging with housing managers and association of owners to explain the opportunities offered by the Fund and the possibility of using the support to finance interventions aimed at solving serious technical problems like failures in the water pipe system, roofing, etc. Financing is provided after the presentation of a technical assessment, which has further contributed to better understand the state of the housing stock and raise awareness of the need to intervene.

Denmark's National Building Fund

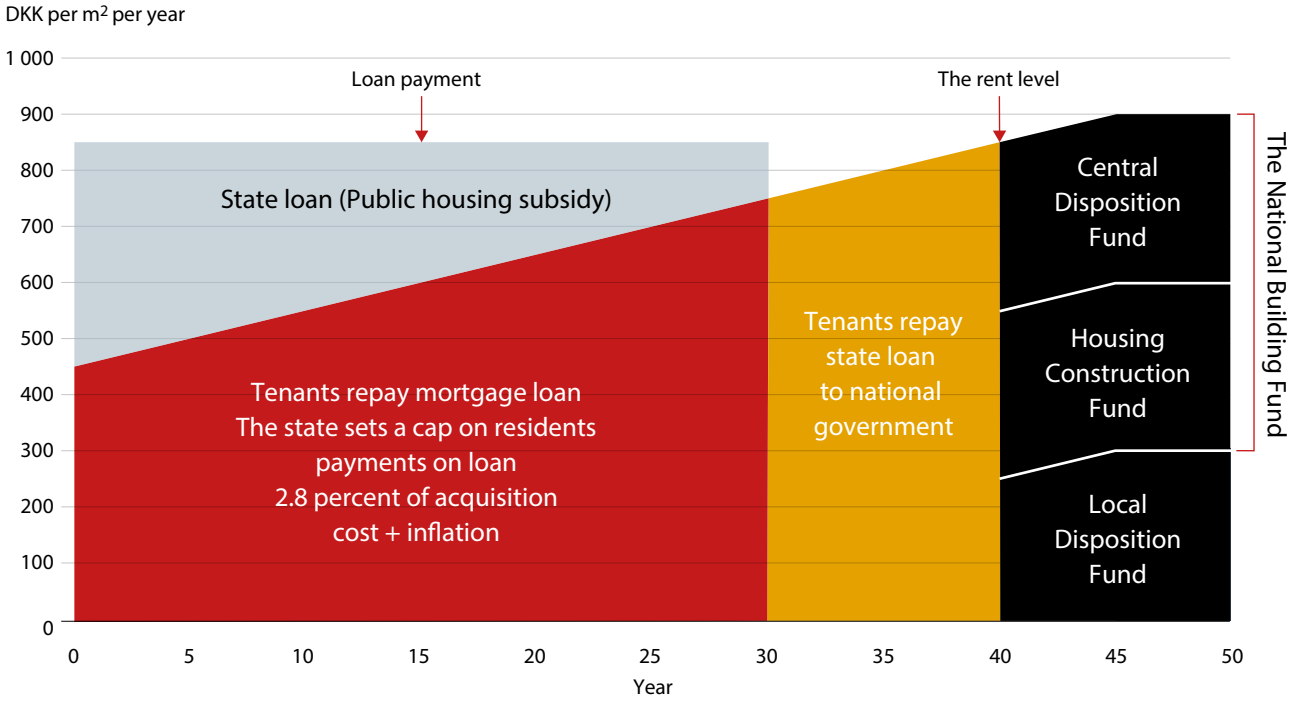
In Denmark, the National Building Fund was created in 1967 and is a key pillar of the national model to provide social and affordable housing, which is largely implemented by housing associations. The Fund is an independent institution outside the state budget. Funding is based on a share of tenants' rents. The initial capital of the Fund was built on contributions from a gradual rent increase in the social housing sector determined in a political agreement in 1966. The resident's rent payments of loan amount to 2.8 percent annually of the total acquisition cost of the property plus housing associations' contributions to mortgage loans, amounting altogether to approximately 3% of the property acquisition cost. The payments are adjusted once a year for the first 20 years after loan take-up, with the increase in the net price index or, if this has risen less, the private sector average earnings index. After the first 20 years, the amount is adjusted by 75% of the increase in these indices. Adjustments are made for the last time in the 45th year following the loan take-up, after which it is maintained at the reached nominal level (Figure 4.2).

When the mortgage loans are paid off, the tenants continue to pay rent which allows them to repay the state loan. Instead of decreasing the rent with the amount used to pay off the mortgage and state loan, this amount contributes to the savings. Two-thirds of the rent amount is paid to the National Building Fund. Tenant contributions also cover the operating costs of the Fund, which consist of general administrative expenses (for example, salaries of the employees managing the funds). Since 2018, the government is reducing financing costs for social housing via the issuance of government-guaranteed mortgage bonds (Denmarks Nationalbank, 2018[58])

Rents are not modulated based on household income and there are no income criteria to apply for social housing. Public housing subsidies are given to all types of rental housing in Denmark and consist of individual allowances, in the form of a housing benefit scheme (*boligydelse*) and a rent rebate scheme (*boligsikring*). These allowances are financed by local authorities, which in turn are refunded to a large extent by the national government. The amount of the housing benefit depends on the rent level excluding costs such as electricity, water and heating costs, the size of the tenancy, how many children and adults are included in the household, the income and assets of the adults living in the home, and, whether the tenant is a senior citizen or a disability pensioner.

Each housing organisation contributes to and can borrow from the Fund, which supports a wide range

Figure 4.2. **National Building Fund financing model (Denmark)**
Illustration of the flow of funding over 50+ years



Source: Presentation of Solveig Råberg Tingey, BL-The Danish Social Housing Association (Denmark), at the occasion of the OECD Expert Workshop on Affordable Housing in Latvia, 5-6 November 2019, Riga, Latvia.

Box 4.2: EU STATE AID AND THE PROVISION OF AFFORDABLE HOUSING

What is EU State Aid?

The European Commission is responsible for ensuring that State Aid complies with EU rules, and has thus developed a set of State Aid Rules. Such rules forbid an intervention by national public authorities or via State resources that provide an advantage to a recipient in any form on a selective basis (for example, to specific companies or industry sectors, to companies located in specific regions, etc.). Such interventions could distort competition and/or may affect trade among Member States.

EU State Aid and affordable housing

There is a great deal of uncertainty regarding the interpretation of EU State Aid Rules as they relate to the provision and development of affordable housing, Gibb and Hayton (2017[59]).

In some circumstances, government interventions are necessary to help promote a well-functioning and equitable economy. Social housing, for example, falls under the Services of General Economic Interest (SGEI) – that is, economic activities that public authorities identify as being of particular importance to citizens and that would not be supplied (or would be supplied under different conditions) without public intervention. While social housing providers are exempt from State Aid notification by EU law, the conditions to benefit from such exemptions are quite strict. In particular, the companies entrusted with a mission of general interest can provide social housing assistance only to "disadvantaged citizens" who are not able to access housing under market conditions. This restrictive definition of the target group has created an unstable legal environment for the development of the social housing sector and a major obstacle to the achievement of social cohesion, a major objective of the Europe 2020 strategy.

Private operators have challenged the EU definition in recent years, resulting in the EU commission challenging the Dutch government on its definition of the scope of social housing. As a result, an income ceiling was required for access to social housing in the Netherlands, which in turn has generated a challenge for households who are squeezed out of social housing (because they are too rich) and too poor to purchase a home on the market (Gibb and Hayton, 2017[59]).[1]

Note: (1) There are income limits in order for households to be eligible for social housing in the Netherlands. Housing associations must annually allocate at least 80% of their vacant social rental homes to households with an income up to EUR 39 055 (price level 2020); 10% may go to households with an income between EUR 39 055 and EUR 43 574 (price level 2020); and 10% can go to households with higher incomes. These limits are regularly revised. For more information, see www.rijksoverheid.nl/onderwerpen/huurwoning/vraag-en-antwoord/sociale-huurwoning-voorwaarden.

Source: Gibb and Hayton (2017[59]), Overcoming Obstacles to the funding and delivery of affordable housing supply in European States; (Taşan-Kok et al., n.d.[60]), www.rijksoverheid.nl/onderwerpen/huurwoning/vraag-en-antwoord/sociale-huurwoning-voorwaarden.

of activities, including renovation work in the existing housing stock and social and preventive measures in vulnerable areas, the development of social master plans that are co-financed with municipalities to support interventions related to security and well-being, crime prevention, education and employment, parental support. The development of a fiscal master plan, agreed with municipalities, is the precondition to access support from the Fund. Every fourth year, a housing agreement negotiated in Parliament determines how much the Fund can finance; notably the Fund has been used to provide support to the construction industry during periods of economic slowdown. The number of housing developments that have paid back their mortgages is increasing, meaning that in the coming years the resources generated by the rents can be used to pay a larger part of physical and social modernisation programmes decided upon in the sector.

Towards a Latvian housing fund

Any model and approach would need to be adapted to Latvia's needs, the profile of potential investors (for example, pension funds) and the size and scope of the investment needed. The Slovak State Housing Development Fund appears to be a particularly relevant approach as it has been successful in supporting not only new affordable buildings but also refurbishments, a clear need in Latvia. Equally relevant is the link between the fund and a comprehensive housing strategy, an approach recommended in this study. While the Slovak Fund has not been allowed to borrow, the borrowing option in addition to the use of EU structural funds could be considered in Latvia. This would make virtually unnecessary an initial budgetary expenditure and would keep the fund fiscally neutral. The fund could be either housed within ALTUM, the state-owned development finance institution, or be an independent body issuing bonds and offer affordable loans (with a state guarantee) to finance construction of affordable rental housing and maintenance. A state guarantee is expected to reduce the borrowing costs. A share of the rents could finance loan repayments and the administrative costs of the fund. Rents could be adjusted once loans have been paid off according to a schedule determined by the maturity of the loans financing the building. However, similar to the Danish approach, a share of the rent could continue to flow to the fund even after the repayment of the original loan with the aim of financing new developments and maintenance costs.

The fund would not need to finance all the costs of new developments and could leverage also commercial lending. In both Denmark and Austria, revolving funds leverage state loans and private loans. For example, in Denmark, 88% of construction costs are financed through mortgage loans (Rogaczewska, 2018[61]). This also the case for the approach of Austria's housing associations' revolving funds, where approximately 40% of a typical project is financed through bank mortgage loans with a maturity of 25 years (1.5% interest rate), the rest being financed with public loans (35 year maturity and 0.5-1.5% interest rate) and equity contribution from housing associations (see below section on facilitating the emergence of new types of housing developers and alternative tenure arrangements).

The capacity of the fund to evaluate projects should be addressed. The fund should be supported by a team that would evaluate loan applications and recommend funding. Funding criteria could be set up in the enabling legislation. Similar to the Danish approach, the fund could be periodically assessed and the overall volume of lending could be determined in consultation with parliament and in conjunction with the overall housing strategy.

DEVELOPING A MORE AFFORDABLE, ATTRACTIVE PRIVATE RENTAL MARKET

Several strategies can be envisaged to support the expansion of Latvia's underdeveloped private rental market to expand affordable housing alternatives for households whose incomes are too high to qualify for social housing, but too low to afford a commercial loan to purchase a home. Expanding the private rental market could be particularly beneficial in the Riga region and other urban areas. In addition to the development of financial tools that could help spur affordable housing development – including rental housing – mentioned above, additional avenues may include regulatory reforms and measures to facilitate the emergence of new types of housing developers and alternative tenure arrangements.

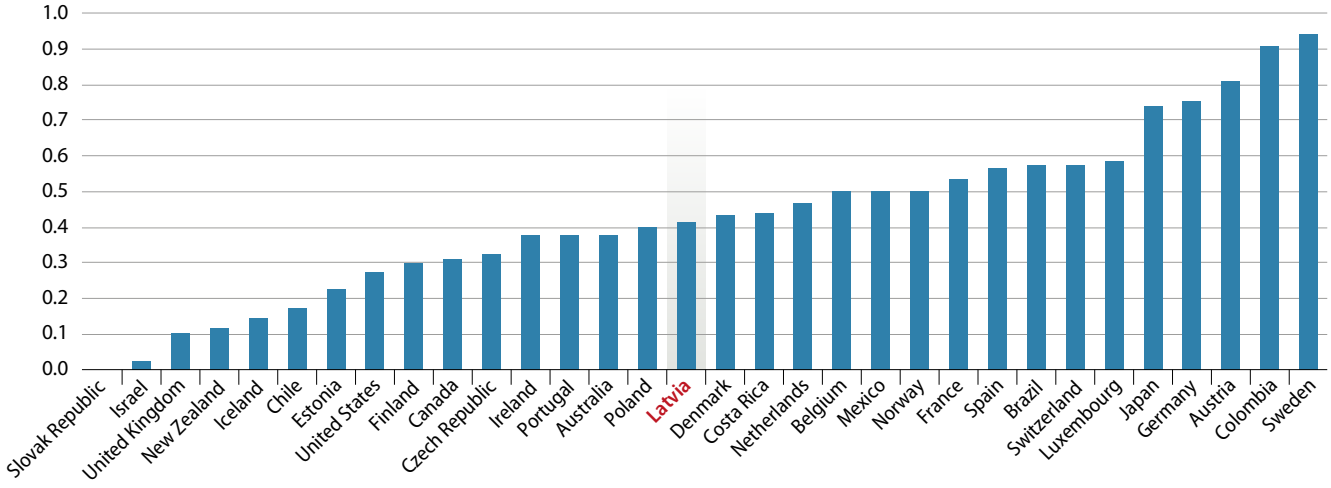
Level the playing field in the private rental market through regulatory reforms

Regulations in the rental market should aim to strike a balance between protections for both landlords and tenants; this means, on the one hand, a secure investment for landlords and investors and, on the other, good-quality secure housing for tenants (Whitehead and Williams, 2018[62]). Indeed, a regulatory framework that balances the rights and responsibilities of landlords and tenants is key to a well-functioning private rental market (Andrews, Caldera Sanchez and Johansson, 2011[28]; de Boer and Bitetti, 2014[63]). There are different

Figure 4.3. **OECD indicator on rental regulation**

Panel A: Rent Control

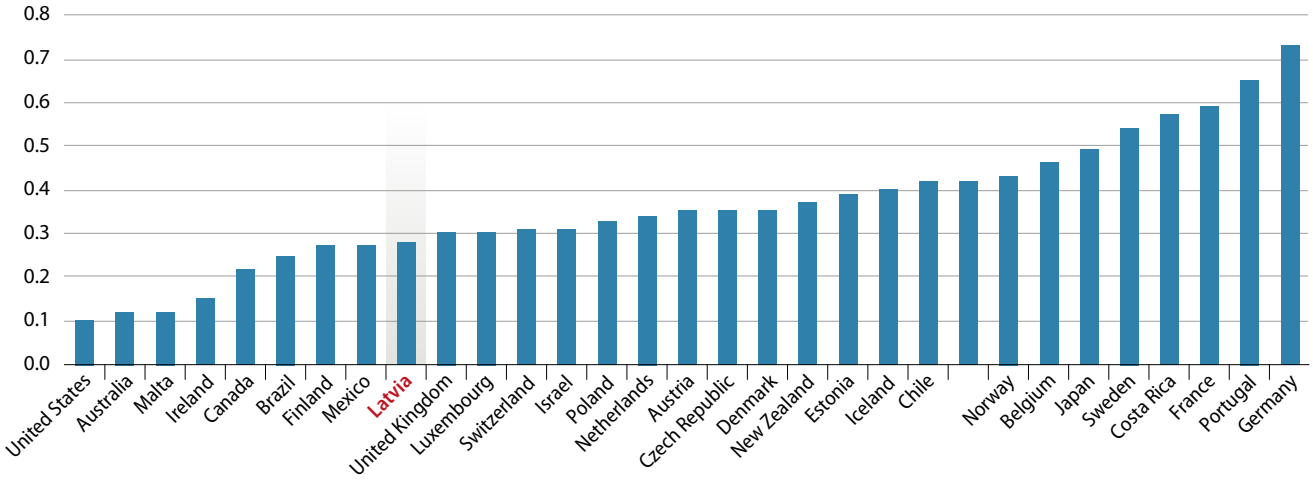
0-1 scale, with 0 indicating lightly- and 1 for highly-regulated rental market



Note: The indicator captures the existence of controls on rent levels and rent increases.

Panel B: **Tenant-Landlord relation indicator**

0-1 scale, with 0 indicating low tenant protection and 1 high tenant protection.



Note: The indicator captures ease of tenant eviction (0 meaning that it is relatively easy to evict tenants), tenure security (0 meaning that tenants have low tenure security and deposit requirement (0 meaning high deposit requirements for tenants).

Source: Update of Andrews, Caldera Sanchez and Johansson, 2011[28]. 2019 OECD Questionnaire on Affordable and Social Housing (QuASH) and OECD calculations.

dimensions of rental regulations to consider, including security of tenure, minimum dwelling quality standards, enforcement procedures, as well as rent controls (Whitehead and Williams, 2018[62]).

Within the broader historical context of mass privatisation in the housing market in Latvia, an unbalanced regulatory framework governing the private rental market has played an important role in stymying its expansion (OECD, 2017[44]; European Commission, 2019[1]). The current residential tenancy regulation dates back to 1993, which includes among other characteristics rental agreements for denationalised residential buildings which have strict rules for rents and include an obligation for municipalities to provide a similar dwelling if the contract is terminated.[3] Further, in case of landlord-tenant disputes, tenants can only be removed from the dwelling through legal action. The dispute resolution process takes place in the courts and tends to be lengthy, averaging about 2 years. Further, even though some rental regulations are in place, enforcement tends to be weak, thereby drastically reducing their effectiveness.

Together, these regulations have led to periods where tenants do not pay their rent and incur financial losses for landlords. From the perspective of property owners, renting is as an unfavourable investment, given that the risks associated with rental income, which is dependent on renters' willingness to pay the agreed rent. As a result, investments in the construction of new rental units is limited, as it is riskier than investing in units targeting owner-occupiers. Further, given the risks associated with delinquent tenants, property owners of existing units may choose to leave them vacant; this may partly explain Latvia's very high housing vacancy rate (estimated in the 2011 Census as 17% of the housing stock in Riga and 20% of the housing stock nationally). Meanwhile, property owners who do rent out apartments usually factor the risk of non-payment into the rental price, thereby driving up prices in the rental market.

Reforms to rental regulations are currently underway and may help to establish more favourable enabling conditions to further develop the rental market (Box 4.3). These reforms have the stated aim to level the playing field for tenants and landlords in the private rental market and to incentivise property owners who are currently operating in the shadow rental market to formally register their rental properties in the land register. These reforms may ease some of the regulatory barriers, which, however, do not appear to be significantly higher than in a number of other OECD members (Figure 4.3).

Nevertheless, there are several additional points to consider. First, given the income tax on rental property, the incentives offered by the pending legislation (e.g. access to faster dispute resolution mechanisms) are unlikely to be sufficient to generate a significant transition of landlords from the "shadow" to the formal rental market. Currently, with respect to personal income tax, rental profit for landlords is taxed at a progressive rate of 20-31%, depending on the landlord's annual income; meanwhile, a 20% personal income tax is charged on the difference between the acquisition cost and the selling price of residential sales. Additional fiscal incentives could be envisaged. Second, attention should be paid to ensure that landlord-tenant relations do not swing too far in the opposite direction, ultimately over-protecting landlords at the expense of tenants, given that currently that relation does not appear to be significantly different from most OECD members (Figure 4.3, Panel B). While adequate tenancy security has positive consequences for the housing market, a substantial reduction in tenant security reduces long-term demand for rental housing (de Boer and Bitetti, 2014[63]).

Finally, Latvian authorities should also consider parallel measures to expand housing support for tenants. As the rights of property owners are strengthened in the proposed reforms, there is a risk of increased evictions and, by extension, homelessness among those who may struggle to afford their rent (in the case of home ownership, at least, Latvia recorded a high number

Box 4.3: PENDING REGULATORY REFORMS TO THE PRIVATE RENTAL MARKET IN LATVIA

The Ministry of Economy began to draft a new legal framework for residential tenancy in 2017, which is under discussion in Parliament (as of March 2020). The draft seeks to i) achieve a better balance between the rights of landlords and tenants in the private rental market and ii) incentivise property owners currently operating in the shadow rental market to formally register their rental properties in a newly established rental registry. Recording the rental property in the rental registry would increase transparency with respect to concluded tenancy agreements, enable tenancy agreements to be binding for renters, and facilitate an accelerated dispute resolution process. This would enable more reliable public information on rental transactions as a means to protect both landlords and tenants.

To provide better protection of the interests of tenants, the draft law stipulates that the landlord would only be able to increase the rent if the tenancy agreement sets out the principles and procedures for raising the rent, for example, linking the raise with the average annual inflation, planned expenditures, or periodically raising the rent. Similarly, the law envisages that members of the tenant's family will no longer enjoy the permanent right to use the living space and are not severally liable for the obligations arising from the tenancy agreement.

New tenancy agreements will be entered into only for a finite period of time (ending the termless rental agreements of the Soviet era), and, upon expiry of the term, the tenant will be obliged to vacate the living space, unless a new tenancy agreement is concluded with the tenant. In the context of the term of the agreement, it should be noted that, as before, a tenant, without giving a reason, will be able to terminate the agreement by notifying the lessor in advance. The lessor will still be able to withdraw from the agreement only in cases and within the time limits provided for in the law, depending on the reasons for withdrawing from the agreement and the duration of the agreement.

Source: Information provided by the Ministry of Economics, with additional details from Ober Haus – Realia Group (2019); see also Law on Residential Tenancy, sections 10 and sections 22-26, Legal Acts of the Republic of Latvia, https://likumi.lv/ta/en/en/id/56863-on-residential-tenancy (accessed March 2020).

of evictions in the aftermath of the crisis (European Commission, 2019[1]). Latvia's homeless population rose by 48% between 2011 and 2017, reaching over 6 800 people (around 0.35% of the total population) ((OECD, 2019[7]), Indicator HC3.1). Further, as discussed in Chapter 3, the small size of the social housing stock does not provide a viable affordable housing alternative to tenants who face financial difficulty. Authorities thus could also consider temporary or emergency financial support measures for tenants, as have been put into place in some OECD countries.

Facilitate the emergence of new types of housing developers and alternative tenure arrangements

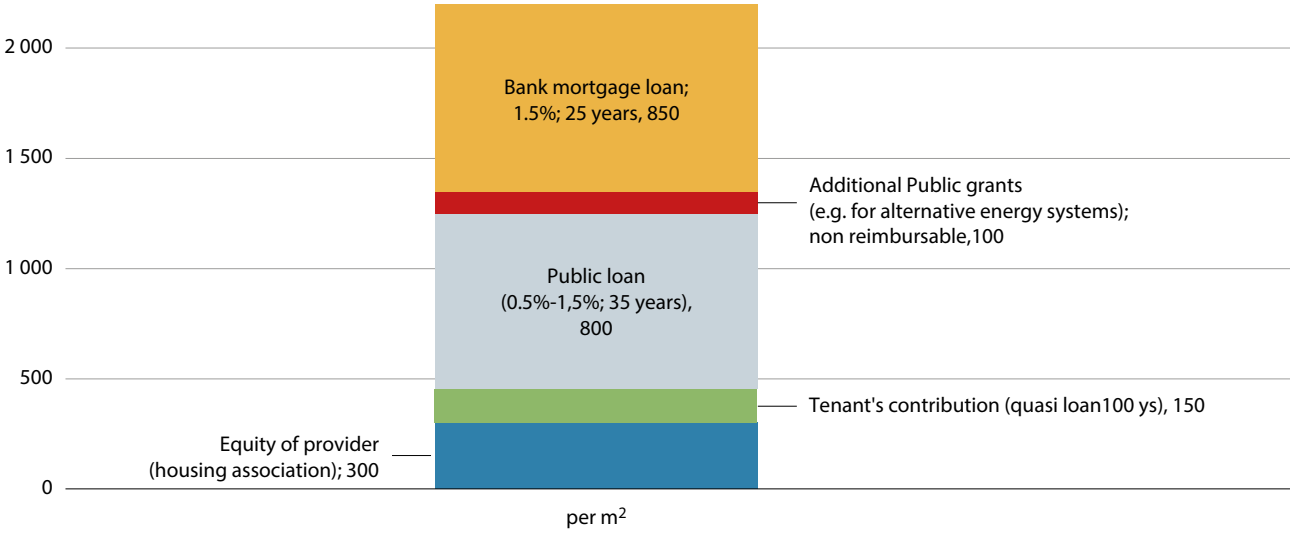
Not-for-profit or limited-profit housing providers can become an important additional source of affordable housing, coupled with revolving funds. Not-for-profit or limited-profit providers are usually obliged to re-invest surpluses in new housing developments and maintenance and tend to provide lower rents than private providers. Moreover, they can be a vehicle to channel funds from both public and private sources to support affordable housing, as exemplified by a typical financing of a rental housing development by housing associations in Austria. Notably, while public loans have the same maturity for not-for-profit and for-profit organisations (35 years), private loans for housing associations tend to have longer terms (25 years compared to an average of 15 years for for-profit organisations) (Figure 4.4).

The Latvian authorities could also aim to expand the competencies of municipal housing companies to include rental management activities, as well as alternative tenure arrangements, such as co-operative rental housing. For instance, the competencies of municipal housing companies could be expanded to include owners/administrators of rental residential buildings, as was successfully done in the case of Valmiera. In addition, Latvia could extend the existing a co-operative housing model to encompass multi-family rental and mixed-tenure residential buildings, beyond the current offer of owner-occupied dwellings (see Box 4.4 for a definition of co-operative housing).

Currently, the provision of rental housing in Latvia is largely carried out by private housing companies and providers. Meanwhile, in many European countries, non-profit and limited-profit providers together with municipal companies are a key source of affordable rental housing. Austria and Germany, for instance, have 70 to 100 years of experience with low- and non-profit housing developers and a mix of housing associations and municipal companies, which today are significant actors in their housing market.

In ***Austria***, housing associations are a distinctive third sector in the housing market; they are neither state-owned nor profit-driven. The Limited-Profit Housing Act sets out the key governance principles for the entire sector, including a limitation of nominal capital paid

Figure 4.4. **Project financing for a typical housing project by housing associations in Austria**
Total costs 2,200 €/m² (300 land price + 1,900 construction costs) – average per square meter



Source: presentation by Gerald Koessl, Austrian Federation of Limited Profit Housing Associations at the OECD Expert Workshop on Affordable Housing in Latvia, 5-6 November 2019, Riga, Latvia.

out to shareholders to 3.5%, a calculation of prices based on actual costs, a continuous reinvestment of capital and a regular audit of the efficient use of resources and the compliance with the Limited-Profit Housing Act. For their core activities housing associations are exempted from corporation tax. The business model of housing associations is based on cost-recovery and a continuous re-investment of any surpluses made into new construction or renovation. This means that a housing association is legally required to charge the cost it takes to build and maintain a house. All calculations are performed at a building block level, which means that every individual building block has to be financially viable.

Housing associations can generate surpluses but these are strictly regulated:

- ***After repayment of the public loan, rents are lowered to a "basic rent" of EUR 1.80 per square meter (set by the Government and adjusted every 2 years based on the Consumer Price Index).*** Switching from cost-based to basic-rent usually means a reduction for the tenant. However, the rent reduction is not equivalent to the decrease in the (net) rent, as in addition to the net rent, housing associations also charge a maintenance fee, which starts at EUR 0.50 per square meter in the first years after construction and goes up to EUR 2 per square meter. The money collected from this maintenance fee goes into a building-specific fund. Around the time the loan is repaid and the (net) rent goes down to basic-rent, the maintenance fee reaches the EUR 2 per square meter ceiling. This usually coincides with the time when major renovation works are usually necessary.

- ***Housing associations are allowed to add 2% to build up a reserve fund to mitigate risks.*** The 2% fee added to rents and remains in place also after the repayment of loans. This is mainly to cover the cost of vacant stock which occurs as part of normal turnover rate when tenants move in and out.

- ***Housing associations can charge tenants up to 3.5% interest for the part of a building financed via a housing association's own equity.*** This is added to the cost-based rent. Housing associations usually finance around 10-20% of a new project from their own equity.

- ***They can charge a flat rate of EUR 250 per year and per household to cover administrative costs.*** Eligible costs and activities are listed in the Limited-Profit Housing Act. The most important are:

  – Calculation and administration of rent payments (incl. rent arrears);

  – Calculation and administration of service charges;

  – Administration of repairs and renovation works;
  – Administration of lettings and sales;

  – Customer service, responding to customer enquiries etc.

There are 185 housing associations across the country, for a total housing stock of 940 000 units, around two thirds for rent and one third for ownership. They are also responsible for about 25-30% of annual new housing construction. It should also be noted that Austria has one of the largest social housing stocks in the OECD; in Vienna and Linz, the share of social housing is approximately 40% and 50% of the total stock respectively. Social housing, managed by housing associations and/or by municipalities, are home to around a quarter of all Austrian households. They are the tenure of choice for many low- and middle-income households, thus providing a good social mix in that it is not limited to only the poorest or neediest households. On average, housing association rents are 23% lower than market-rate rents, and most offer permanent tenancies.

In ***Germany***, low- and non-profit housing developers can be in the form of co-operatives, municipal housing companies, public housing companies, private housing companies and NGOs. Roughly 13 million inhabitants live in co-operatives or in municipal housing, where rent levels in 2017 were almost 20% below the rent index level. Notably, 54% of German households live in rental dwellings (private and subsidised combined), which is among the largest shares in the OECD. The bulk of co-operative housing development occurred after the Second World War. In the face of housing supply challenges, small savings from multiple members established co-operatives and built the first residential buildings for its members.

In Germany, members of co-operative housing buy shares, with the amount varying from one co-operative to another. When leaving the co-operative, the initial amount is reimbursed to the members at nominal value by the co-operative. Members enjoy security of tenure through a perpetual lease as long as they comply with the terms of the occupancy contract. Rents are regulated and can increase only within prescribed limits. Some

co-operatives have developed wider social services, such as kindergartens or services for the elderly. Co-operative by-laws rule the non-profit principle and the use of surpluses must be decided by the General Assembly.

The Latvian authorities could start to build capacity among municipal housing management companies to include the development and management of rental or mixed-tenure properties. The successful experience of Valmiera's municipal housing maintenance and administration company, which built and now manages 150 affordable rental apartments, could be evaluated and transferred to other municipal companies. The Association of Management and Administration of Latvian Housing (AMALH), which is the largest and most experienced non-governmental organisation in Latvia working in real estate management, could further support the development and management of an expanded rental/co-operative housing stock by carrying out feasibility studies and model business plans for affordable rental development. The Polish model of Social Building Associations (*Towaryszystwa Budownictwa Spolecznego*, TBS) could provide inspiration for building capacity within municipal administrations for this new type of work. Developments of mixed tenure (ownership and rental) can provide more affordable housing opportunities to a broader segment of the population, and can also help to provide social mix, avoiding the concentration of low-income households in neighbourhoods.

In addition, efforts could be undertaken to raise awareness around non-profit housing developers and housing co-operatives, and their potential role in creating more affordable housing opportunities in Latvia. These efforts could start with an initial scoping of the understanding among the population of housing co-operatives and associations (for example, through focus groups). It could continue with pilots and experiments around the best way to communicate the benefits of co-operative arrangements.

Further, households of varying financial capacities could be accommodated by different types of housing support, including co-operative housing. As a complement to regulatory measures, additional public support could also be envisaged to facilitate access to co-operative housing, particularly for households in the lower end of the "missing middle." In Germany, public authorities provide financial support to lower-income households to cover the cost of membership in co-operative housing, such as through loans or grants. The city of Berlin, for instance, supports low-income households who benefit from the housing allowance when acquiring shares in housing co-operatives for the first time via interest-free loans and repayment waivers.

Box 4.4: **WHAT IS CO-OPERATIVE HOUSING?**

What are housing co-operatives?

In many European countries, co-operative housing, which dates to the 19th and early 20th centuries – depending on how it is designed – can provide an affordable alternative to buying a home or a more affordable, secure form of renting a quality dwelling. Co-operative housing may be owner-occupied, or available to tenants, or a mix of the two. In Germany, for instance, co-operatives are a form of housing tenure with both ownership and rental-like rights. Instead of owning or renting a property, co-operative members buy shares – which can include contributions to the construction and maintenance of the dwellings – in turn giving them the right to security of tenure through a perpetual lease.

Co-operative members form governing bodies to manage the property and pay monthly fees for utilities, maintenance and other bills. Members often have the benefit of significant shared spaces and make a commitment to contribute their time to the well-being of the cooperative community.

The model of cooperative rental housing as a so-called hybrid or mixed-tenure form with individual tenure-like rights can be one way to provide affordable rental housing; this model is present in many European countries.

Housing cooperatives are primarily financed through member contributions and mortgages, and may also benefit from public support in the form of tax relief and low-interest loans (such as those provided by state-owned development and promotional banks).

CALIBRATING SUPPORT FOR LOWER-INCOME HOUSEHOLDS AND FAMILIES WITH CHILDREN

Investments to increase the supply of good-quality affordable housing could be complemented by demand-side support schemes. Targeted demand-side support, such as through housing benefits and financial assistance to homeowners or homebuyers, can help channel housing assistance to households in need.

Expanding the housing benefit scheme

As discussed in Chapter 3, investment in housing support schemes for low-income and vulnerable households in Latvia (social housing and the housing

benefit) remains well below the OECD average. In 2017, just under 18% of households in the bottom income quintile received the housing benefit in 2017, and less than 7% of the total population. These levels are well below the coverage rates in other OECD countries. Further, the amount of the benefit, averaging EUR 15 per month, equivalent to less than 2% of the gross wage of households in the bottom decile, is also very low by OECD standards.

Reforms to the housing benefit could aim to both i) increase the generosity of the housing benefit by raising benefit amounts and/or eligibility thresholds, and ii) provide access to the benefit to a larger share of needy households, in particular, families with children, single parents, and working-age adults in unstable employment. This would enable some households whose income is just over the current threshold to be eligible for support, thereby reducing the share of households falling into the "missing middle."

The section below simulates some of the impacts of potential reforms to the housing benefit scheme. A first set of potential reforms simulates the impacts of increase in the standard housing expenditure covered by the housing benefit. A second set simulates the addition of an intermediate step in the calculation of the amount of the housing benefit, which would exclude a certain amount of monthly earned income before calculating the benefit amount (termed an "earnings disregard"). An earnings disregard has already been in practice in municipalities since 2017 as part of the means testing for the guaranteed minimum income and housing benefit in the case of needy households in which a person has acquired a new job. It should be noted that the simulations are illustrative examples only of how different types and levels of reforms can affect the coverage levels of the housing benefit; more granular analysis would be needed to design a specific reform.

Over the long term, it would be important to combine an expanded housing benefit scheme with investments to increase the supply of quality, affordable housing as recommended above. Such combined efforts will be more effective in supporting affordability objectives than increased housing benefits alone.

Calibrating housing support for families with children

Equally important is to calibrate the support to families with children to ensure that those most in need can benefit from adequate support. The rest of this section looks at the relation between housing and fertility and the experience of Hungary in supporting families with children.

Decent quality and affordable housing for families, driven in part by concerns over low fertility rates, is an important policy challenge for Latvia. According to the OECD Family Database (oe.cd/fdb) and OECD Child Well-Being Data Portal (oe.cd/child-well-being):

- Families with children account for around 30% of all households: households with one child are most common (18% of all households), followed by two children (11%), and three or more children (3%). Around 13% of household have children under the age of 6 years old. Overall, Latvia records an average household size of 2.30, very close to the OECD average of 2.34.

- At 28%, the share of children living with a single parent is well above the OECD average (17%), though this share has fallen slightly since 2005. However, most children live with two parents, either as a married couple (55%) or a cohabiting couple (16%) (OECD, 2019[64]).

- Housing quality is a particular challenge for families with children: across the OECD, Latvia records one of the highest shares of children living in housing without basic facilities (10%), and around 26% of children live in households with self-reported poor environmental conditions (OECD, 2019[65]).

- Latvia's fertility rate has been increasing in recent years, and is now in line with the OECD average of 1.7 in 2017.

The primary policy support targeting families with children in Latvia are offered in the form of a mortgage guarantee to facilitate the purchase of a home, as well as a one-time fee reduction for registering property ownership (Chapter 3). To be eligible for these programmes, households must have a sufficient income to afford a commercial loan, thus limiting the public guarantee to higher-income households.

Indeed, a number of OECD countries offer some kind of housing support or incentives to support families with children. These include housing allowances, tax benefits, targeted subsidies and mortgage support, among others. In some cases, such as in Hungary, such

policies also have an explicit aim to boost fertility rates. However, while housing supports can help create a more favourable environment for families, they alone are unlikely to boost fertility rates to high and sustained levels. Instead, housing policies can be one element of a broader package of family supports – including labour market supports such as paid leave, child care services, and flexible working – to create an environment in which families are able to have their desired number of children (Box 4.5).

Lessons from Hungary's several decades of experience with housing-related supports for families with children, namely the Family Housing Allowance (FHA), could be useful for Latvia. Since its introduction, the FHA has provided varying degrees of financial support to households with children, with (most recently) more generous support triggered by the third child (Box 4.6). Several features of the FHA are worth highlighting, as they provide important context for understanding the design of the measure and its outcomes thus far:

- ***Type of housing for which the allowance can be used:*** While the previous versions of the FHA could only be used to acquire state-built housing (and, since 2002, only newly constructed dwellings), the latest version of the FHA allows households to either purchase new or existing dwellings, or to expand existing dwellings (with a smaller allowance for housing expansion relative to housing purchase). A minimum and maximum dwelling size and dwelling purchase limit were introduced in 2016, which varied depending on the number of children, but the maximum size and price limits were later removed.

- ***Eligibility of households to qualify for the allowance:*** The FHA is open to families with at least one child, as well as to couples who plan to have children at the time of the application, with age and timing criteria[4]. There are no income requirements to be eligible for the FHA, and initial restrictions that limited the allowance to first-time homeowners were subsequently removed. Further, a number of restrictions limit the ability of lower-income and more vulnerable households to benefit from the allowance, such as proof of continuous employment in addition to the absence of public debt, a poor loan history or a criminal record.

- ***Calculation of the subsidy amount:*** The amount of the subsidy depends on the family structure, including the number of children, and cannot exceed 65% of the construction or purchase cost. The programme is designed to provide a higher allowance to households with more children: in the most recent version of the FHA, there is a significantly larger allowance triggered by the birth of the third child than was previously the case.

- ***Administration of the housing allowance:*** The allowance is typically outsourced to commercial financial institutions, which control eligibility and may also provide additional loans to complement the government measure.

The criteria of the FHA have been revised multiple times, including since its reintroduction in 2015. The most recent adjustments have increased the regressivity of the measure, and facilitated the acquisition of larger, more expensive homes among higher-income households. Some preliminary evidence suggests that it has been most advantageous to young families with high incomes and/or significant parental support, whilst excluding low- and lower-middle income households. However, the frequent adjustments to the FHA render a comprehensive assessment of the measure difficult.

The take-up of the FHA among eligible households in Hungary has been significant, contributing to 13% of all housing market transactions between 2015 and 2018, and by August 2019, the number of applications had reached 114 000 (State Secretariat for Family and Youth Affairs, 2019). Over 2016 and 2018, just under two-thirds of total funding offered through the FHA supported new housing construction, for a total of around EUR 402 million, while over a third of the funding was allocated to households to purchase existing dwellings (EUR 246 million) (CSO, 2019). Further, according to the government, nearly half of FHA recipients have two children, 38% have 3 or more children, and around 16% had one child (FHA 2019).

The effects of the policy on both housing and fertility outcomes are more mixed, however. First, the FHA, together with the reduced VAT allowance, stimulated housing demand and construction, whilst also accelerating an increase in housing prices, which had already begun to rise after the crisis. This increase in housing prices had the effect of weakening at least one of the policy's objectives, i.e. to make housing – specifically home ownership – more affordable. Second, in terms of the demographic and social impacts of the FHA, preliminary estimates suggest that the FHA will affect the families of around 10% of new-born children

Box 4.5: **UNPACKING THE RELATIONSHIP BETWEEN HOUSING AND FERTILITY**

Decisions to form a family, particularly those revolving around parenthood, require a range of considerations with respect to housing. With the first or any subsequent birth, more space is often needed to sufficiently accommodate the entire family, thus the availability of suitable housing may influence childbearing intentions and behaviour (Kulu and Steele, 2016[66]). While childbearing intentions often facilitate moves to adequate housing (Kulu and Vikat, 2007[67]), home ownership or long-term rentals provide additional housing security leading to positive associations with the intention and the likelihood of having a first child (Vignoli, Rinesi and Mussino, 2013[68]; Kim and Sparks, 2019[69]). At the same time, housing property is a major source of household wealth and housing prices have almost doubled across OECD member states between 2000 and 2018 (OECD, 2020[70]).

Theoretically, increases in housing prices might affect family formation and fertility through two different mechanisms: first, increased housing prices may lead to reduced birth rates or postponed parenthood among renters, as the extra housing space needed becomes less affordable. This may in particular affect those in the early stages of their labour market career, as borrowing constraints and a lack of sufficient savings can impede adequate housing transitions. Second, because the value of property increases, the same trends in housing prices may lead to raised fertility for homeowners, given they prefer more children over consumption goods (Liu and Clark, 2017[71]). This positive wealth effect might not only cause more births among those that already possess sufficient housing space for additional children, but also affect those that that need to upgrade or move as borrowing constraints are relaxed with increased wealth.

Recent empirical evidence shows that the distinction between households in rental dwellings and those who own their home is important. Lovenheim and Mumford (2013[72]) show that for homeowners in the US, an increase in housing wealth is associated with a higher likelihood of having a child. The increased fertility for homeowners is not concentrated among younger women indicating potential increases in the total fertility, i.e. the total number of births, and not just the timing of births.

At the same time, there seems to be no sign of an effect of rent price increases on fertility rates for those who are renting. Evidence from Canada shows housing prices are linked to an increased marginal fertility for homeowners that remain in their initial real estate board area (Clark and Ferrer, 2019[73]). Again, there is no significant effect on the fertility for renters. Similar effects for non-movers are found for Australia, concentrated among married women in their early 30s who already gave birth to at least one child (Atalay, Li and Whelan, 2017[74]). Dettling and Kearney (2014[75]) also show a significant association between house price growth and increased fertility for urban homeowners in the US, but a simultaneous, albeit weaker, decrease in fertility for renters.

For Japan, Mizutani (2015[76]) finds a positive relationship between housing wealth and fertility only for homeowners with housing loans, potentially driven by a system largely based on recourse lending.

Driven by differences in home-ownership rates, e.g. younger families being more likely to rent, the net effects of house price increases appear to vary across demographic groups. While the above studies mostly found positive overall net effects of house price growth on fertility, other studies exploiting variation in regulatory constraints come to different conclusions: for example, Aksoy (2016[77]) uses variation in house prices induced by planning restrictions in England and finds negative net effects of price growth on fertility, largely driven by young renters. Shoag and Russell (2018[78]) find that land use regulations in the US, whose stringency has been linked to higher house prices (Ihlanfeldt, 2007[79]), reduce fertility rates for younger women while leading to simultaneous, but weaker, increases for older women. Clark (2012[80]) suggests that higher house prices simply delay (first) child birth by 3 to 4 years in the US, with no effect on total fertility, and only concentrated in higher price markets housing larger populations with advanced degrees and high family incomes.

The literature relating home-ownership support policies with fertility is scarce, yet national contexts with limited availability of mortgages are typically characterised by low fertility rates and a high average age at first motherhood (Mulder and Billari, 2010[81]). An empirical evaluation of Hungarian family policies on fertility highlights that raising home-ownership support by 1% would increase fertility by about 1.21%. This would result in 1 087 additional births, costing about HUF 1.19 million (3 500 EUR) per additional child (Szabó-Morvai et al., 2019[82]). The report also shows that mortgage interest subsidies have a positive, though weaker effect on fertility. This can be seen as related to the fertility effects of mortgage rate adjustments facilitated by monetary policy changes (Fergus and Dettling, 2020[83]).

Overall, there seems to be a recent consensus that house price increases affect families differently, depending on age as well as the status of their housing situation and family formation process. Whether there are positive or negative aggregate effects on fertility has found no concluding answer and might depend on various contextual factors. The non-consensus highlights that individual intentions and decision processes regarding family formation and childbearing are formed within a complex relationship between prices and uncertainty, as well as individual circumstances, such as wealth, education and employment (Clark, 2012[80]). Policy might shape positive fertility developments by providing easier access to mortgage and home-ownership for younger couples through subsidies and guarantees.

Box 4.6: HUNGARY'S FAMILY HOUSING ALLOWANCE

The current version of the FHA was launched in 2015, following several decades of a social policy allowance introduced in 1971 that aimed to provide housing support to families with children. The measure has been subject to a number of revisions over the years.

The FHA was reintroduced in 2015 in response to two parallel policy challenges. First, in 2015, Hungary was beginning to recover from a housing market crisis that had seen an 80% drop in new housing construction (from over 36 000 units in 2008 to 7 300 units in 2013), in real house prices (by over 30%) and in housing transactions (by 40%), with a 15 percentage-point increase in the share of non-performing loans between 2008 and 2014 (CSO, 2019a, CSO, 2019b). The recovery of the housing market in 2015 provided an opportunity for a new set of housing policy measures aimed at strengthening the middle- and upper-classes. Second, like Latvia, Hungary has faced an overall low and declining fertility rate, which at 1.5 in 2017 is currently below that of Latvia and the OECD average (OECD, 2019[53]).

The FHA of 2015 was part of a broader housing incentives package that also included a reduction in the VAT allowance from 27% to 5% of new buildings (with a cap on dwelling size and price), which was put in place for a three-year period. Both the FHA and the VAT measures were designed to promote housing construction, largely by facilitating the construction and acquisition of new owner-occupied housing. In 2019, the government introduced seven new family policy measures, which included among others childbirth incentive loans and a new sub-programme of the FHA targeting small towns and rural settlements.

over the 2015-2019 period. The role of the FHA in boosting fertility is much harder to assess at this stage, but thus far of the 37 000 "planned" children, around 30% have been born.

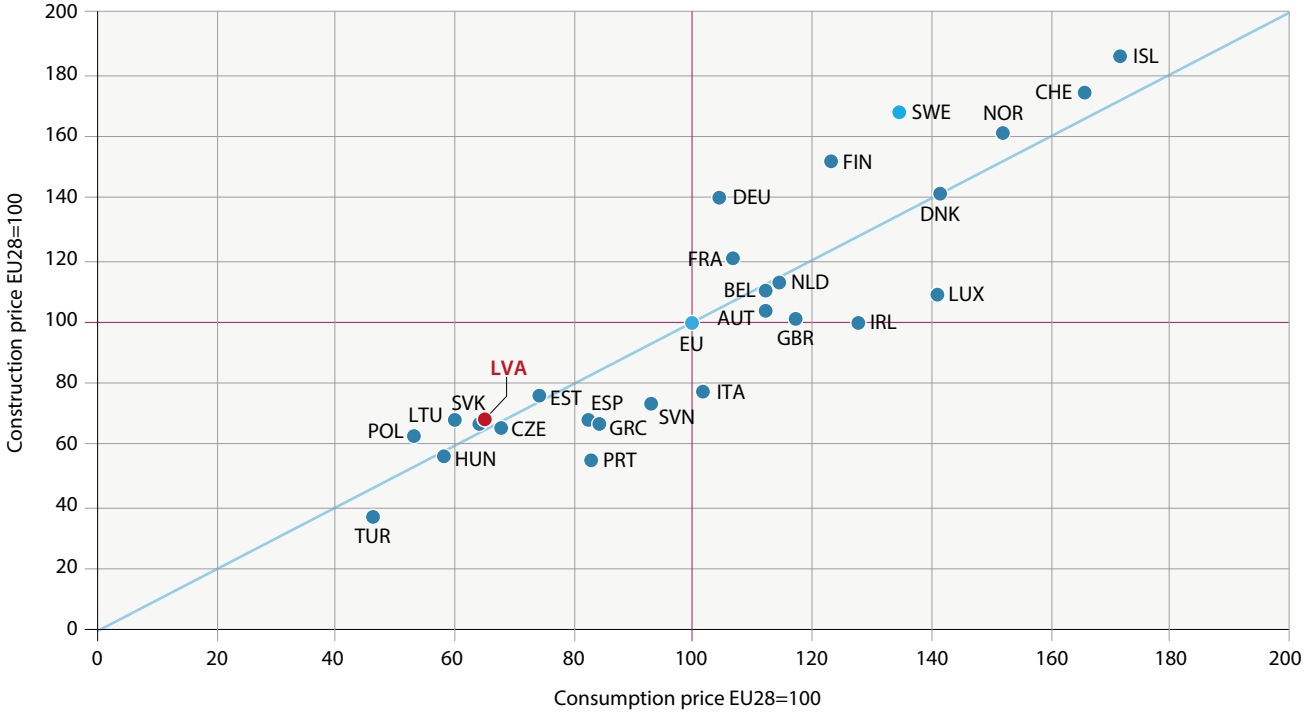
Should Latvian authorities wish to expand housing support to families with children, Hungary's FHA could provide inspiration, but several key differences in the design of the allowance should be taken into account. Namely, the allowance should be means-tested to target to middle-income family households, rather than largely benefit those in higher-income groups. For instance, the analysis of this study suggests single-parent families in particular could benefit from additional housing support. To limit overconsumption of housing (e.g. households who are eligible to afford a commercial loan without the allowance but use the allowance to purchase a bigger home), the authorities could put a limit on the size or the purchase price of the dwelling (as has been done in the case of the existing mortgage guarantee for families), with regional adjustments. It is also important to keep in mind one drawback of housing allowances – which was experienced in the case of Hungary's FHA – is that they can contribute to an increase in housing prices, particularly in tight markets (Salvi del Pero et al., 2016[84]), thereby reducing housing affordability more broadly.

REDUCING CONSTRUCTION AND DEVELOPMENT COSTS

Reducing construction costs could further support affordable housing development. Labour (26%), material (26%) and administrative (15%) costs compose the three largest expenditure item related to a construction project in Latvia. While construction costs in Latvia increased by over 4% by the end of 2018, construction costs in the residential market increased to an even greater extent (over 6%) (Ober Haus - Realia Group, 2019[85]). Further, looking forward, construction costs are expected to continue to increase over the coming years, to reach a 10% increase in 2023, with costs in the residential sector to increase further still (by 14.5% by 2023) (Oxford Research Baltics – prepared for Ministry of Economics, 2019). Despite Latvia's overall favourable ranking in the World Bank Doing Business 2020 (19 out of 190 economies and 7 in the European Union), it is comparatively less competitive in terms of "Dealing with Construction Permits" (56 out of 190), "Registering Property" (25 out of 190) and "Getting Electricity" (61 out of 190) (World Bank, 2020[86]).

The World Bank Doing Business tracks the number of days necessary to obtain a construction permit for a commercial activity, specifically a warehouse. While there might be some differences in the procedures and permits required, this can be used as an acceptable proxy for obtaining a permit for residential buildings (for which data are not available). Based on an assessment conducted in 2019, Doing Business data indicate that obtaining a construction permit requires 14 procedures (compared to 12.5 for the OECD average) and 192 days (compared to 154.6 for the OECD average). Changes in the regulation of the construction sector introduced in October 2019 have significantly streamlined these procedures. A Construction Information System (known as BIS) provides a single electronic platform for dealing with construction permits from the initial submission to the commissioning of the construction project. Electronic filing is expected to significantly reduce the time necessary to deal with construction permits as it allows

Figure 4.5. **Construction costs**
2017



Note: Countries above the 45 degree line have higher price levels relative to the EU28 average for construction than for consumer goods.

Construction prices include prices actually paid in markets for the elementary components for residential buildings, non-residential buildings and civil engineering works (see https://ec.europa.eu/eurostat/statistics-explained/pdfscache/8801.pdf).

Consumption prices are based on the annual national average prices for more than 2000 goods and services, including food, clothing, energy, transport services, communication services (see https://ec.europa.eu/eurostat/statistics-explained/index.php/Comparative_price_levels_of_consumer_goods_and_services).

Source: Eurostat.

for the simultaneous filing and completion of different procedures. From January 2020, all new construction plans need to be filed and processed electronically through BIS as mandated by an amendment to the Construction Law. These reforms should contribute to a reduction in administrative costs related to construction.

Other avenues could be explored to reduce construction costs. The experience of Germany's Construction Cost Reduction Committee may provide some useful insights on how to evaluate the drivers of a sharp increase in construction costs and develop solutions beyond administrative costs and simplification (Box 4.7) (Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit, 2015[87]). Working with the construction industry and construction manufacturers can help explore construction methods that could reduce costs of material and accelerate the construction process. In Germany, for instance, the construction and architect associations worked with the Ministry of Interiors and Construction for the identification of providers for serial and modular constructions on which housing associations could rely for affordable housing projects. 3D printers can also be used to reduce costs of affordable housing (Box 4.8).

However, while construction costs in Latvia might be rising, in part also in response to a general recovery and wage increase, they are nonetheless in line with the price of consumer goods (Figure 4.5). It suggests that construction costs may not be a significant barrier to attracting investment and increasing the supply of housing in Latvia. Moreover, costs of construction and possible reductions should not come at the expenses of the quality of the new housing stock, to avoid falling in the same quality gap inherited from the past. Other issues (which are beyond the scope of this study) might also need attention, in particular the shortage of qualified workers, especially construction managers, water and wastewater engineers and roofers, to ensure that the construction sector meets the needs of the country (European Commission, 2018[88]).

Box 4.7: **SELECTED CONCLUSIONS OF GERMANY'S CONSTRUCTION COST REDUCTION COMMISSION**

To address rising construction costs, in Germany, the Construction Cost Reduction Commission developed 71 recommendations for the federal, regional (Länder) and municipal governments, as well as the housing and construction industries, planners, researchers and others, in a country-wide effort to drive down construction costs. These efforts were in response to findings that the construction price index for residential buildings rose by 41-61% between 2000 and 2018, while the cost of living increased by around 31%.

The main drivers of increases in construction costs included increased demand requirements; new and amended legislation; improvements to housing quality (including increased living space); changes to the planning and construction process (including the industrialisation of construction); increased need for sectoral planning as a result of changes to the regulatory framework; and higher prices of construction materials and services (for instance, material costs increased by more than 30% between 2000 and 2013).

The recommendations of the multi-stakeholder commission targeted public actors at different levels of government, as well as actors in the construction industry and manufacturers. Below are selected recommendations for each group:

Recommendations for the federal, regional and municipal government:

- Conduct a mandatory impact assessment of housing costs for all drafts of laws, regulations and standards; develop appropriate methodology based on model buildings.
- Implement the transparency initiative of the Federal Government and the Länder (regions) to indicate requirements that will increase costs, and examine new requirements under cost-benefit considerations.
- Harmonise existing building regulations, approvals and quality requirements, for instance by adopting model building regulations.
- Conduct a critical assessment of the minimum requirements for noise protection (cost-benefit analysis, standardisation and legal protection)
- Improve the evidence base of construction costs, drawing on completed construction projects, observation of cost influencing factors, contribution of innovative manufacturing processes
- Implement EU directives 1:1 (no tightening)
- Define quality standards for simplification and rationalisation
- Set minimum and uniform standards for social housing
- Review the real estate transfer tax, and reduce if necessary
- Hold multidisciplinary competitions to encourage collaboration among planners

Recommendations for the construction industry and construction manufacturers:

- Further systematise processes and work procedures
- Work more closely with planners to reduce costs
- Create the conditions for serial and modular construction

Source: (Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit, 2015[87])

Modular apartments.

Box 4.8: **INNOVATIVE APPROACHES TO REDUCING CONSTRUCTION COSTS**

Serial and modular buildings

In Germany, the construction industry has identified nine providers of serial and modular construction concepts for affordable housing developments. The nine providers were identified though a Europe-wide call for proposals and selected out of 50 applicants.

The model buildings include the following features:

- 24 living units;
- Single building;
- Only for residential use;
- 4 floors;
- No lift.

The offering price of the nine model buildings ranges between 2.000 and 3.000 Euros per square meter. The prices are set for 5 years. In 2018, the ministry of Interiors and Constructions *(Bundesinnen- und Bauministerium)*, the federal Chamber of Architects *(Bundesarchitektenkammer)*, and the building industry association *(Bundesverband der Bauindustrie)*, GdW Housing Germany signed a framework agreement that allows housing companies to use these concept building for affordable housing developments.

The framework agreement also allows for considerable time-savings as it anticipates tendering and planning requirements.

3D printers

In Nantes, France, public authorities, private sector and research institutions partnered to use a 3D printer to build a social housing project consisting of a 5-room house of 95m^2. A poly-articulated industrial robot deposited three layers of materials: two layers of expansive foam to serve as formwork for a third layer of concrete. Once the walls were constructed, the foam was kept in place in order to insulate the house without thermal bridging. After the elevation of these insulated structural walls, more traditional techniques were used for the roofing and finishing work.

The 3D printed parts were realised in less than three days instead of three weeks with traditional means. Overall, the construction price was reduced by 20%. Other benefits include:

- Improvement of the energy performance of construction, including zero waste, raw materials, and decreased transport.
- Reduction of the risk of musculoskeletal disorders, as construction workers don't have to go up and down scaffolding.
- Reduced dependence on good weather conditions.

Source: "Germany: Serial and Modular Construction", Housing Europe, http://www.housingeurope.eu/blog-1126/germany-serial-and-modular-construction (accessed in March 2020); (European Commission, 2019[89]).

ILLUSTRATIVE SIMULATIONS: POTENTIAL IMPACTS OF DIFFERENT TYPES OF HOUSING POLICY INTERVENTIONS IN LATVIA

This section proposes a series of simulations to estimate the potential impact of different policy reform scenarios, both in terms of the share of the population who could be reached by the reform, as well as the potential financial resources that could be required. Two types of policy reforms are tested: the first series simulates the impacts of the provision of government loans or grants to promote home ownership and to upgrade existing dwellings, which reflect one key objective of Latvian policy makers. The second series of simulations, developed with EUROMOD[5], estimates the impacts of reforms to the housing benefit, to explore how the benefit could be expanded to reach more households in need. These simulations have been developed as a tool for policy makers and are for illustrative purposes only; they should not be used for budgetary planning.

Simulating the impacts of different financial support schemes to promote home ownership, build new housing, and upgrade existing dwellings

There are a range of measures that public authorities can consider to support home ownership, build new housing and upgrade existing dwellings, including financial support (such as grants or loans) to homebuyers and/or developers. The potential impacts of the following interventions have been simulated, each of which could be designed to target different types of households:

- A homebuyer's grant (e.g. lump sum) to support the purchase of a dwelling;
- A direct government low-interest loan to support the purchase of a dwelling;
- A grant or direct government low-interest loan to improve the affordability of new-build apartments;
- A government-supported low-interest loan for new-build rental dwellings;
- A grant to households to support dwelling improvements.

This set of simulations is based on a range of assumptions on house prices, interest rates, access to deposits, mortgage repayment schedules and maintenance and utility costs, among other things. Variations in these parameters would affect the effectiveness and costs of the interventions simulated. Moreover, as in Chapter 2, when assessing the impact on

housing affordability, the estimates provide an indication of households' ability to afford a mortgage without spending more than 30% of their disposable income on housing costs – a common threshold for an acceptable share to be dedicated towards housing (Gabriel et al., 2005[13]) and a threshold used by some commercial lenders in Latvia to assess mortgage affordability (SEB, 2019[14]).

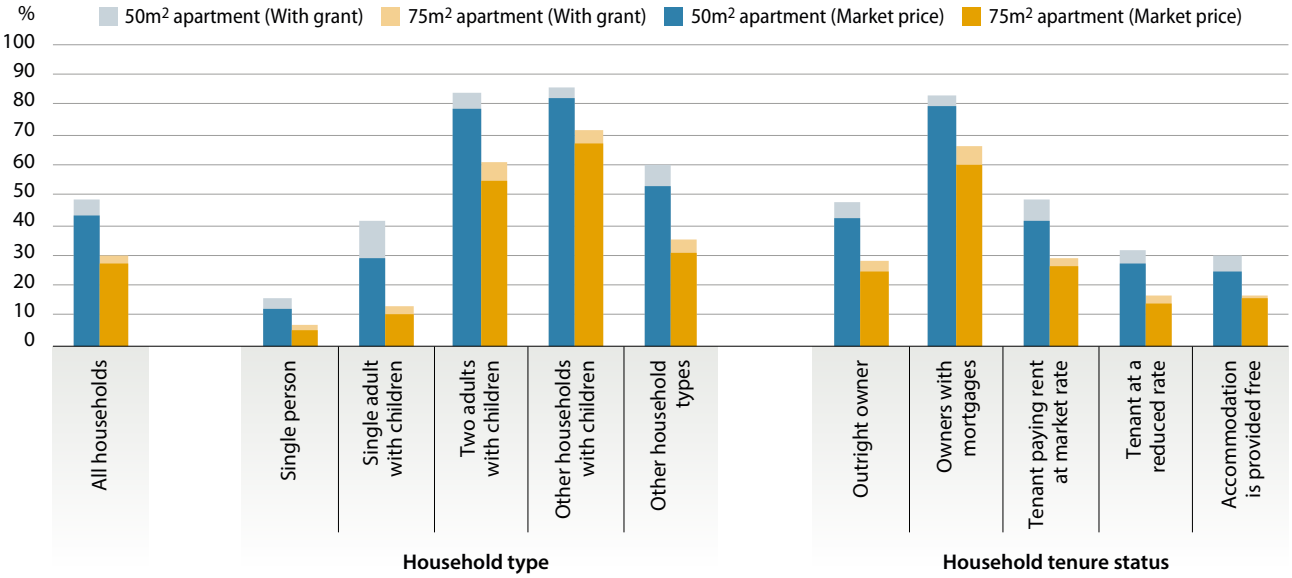
These simulations do *not* assess households' actual eligibility for a mortgage, which is determined by lenders using a range of criteria, including age, household composition, and existing debt obligations. Figure A C.5-Figure A C.9 in Annex C illustrate the impact on affordability of the inclusion of an additional criteria – a residual household disposable income of EUR 300 per person, per month, after mortgage costs. In addition, in selecting an appropriate policy instrument, policy makers also need to balance the impacts of any given measure on affordability with a series of fiscal and policy considerations, which are not fully considered here. These may include, *inter alia*, the impact on the state budget, the potential default risks and liabilities incurred by the government (in the case of a government loan), as well as administrative and management costs.

Illustrative example: A homebuyer's grant

Latvia could consider providing financial support to prospective homebuyers, which could include among the potential beneficiaries families with children, as has been done for families through the FHA in Hungary. Hungary's FHA is offered as a non-repayable lump sum of up to EUR 30 000, with an average grant amount of EUR 19 500 for new homes (equivalent to around 28% of the average purchase price of a new home), and an average grant amount of EUR 4 200 for existing dwellings (roughly 10% of the purchase price of the home). Figure 4.6 and Figure 4.7 illustrate the potential impact

Figure 4.6. **A homebuyer's grant of EUR 10 000 would have only a limited impact on the share of households that could afford a mortgage**

Illustrative estimate of the share of households that could afford a mortgage on an apartment without spending more than 30% of household disposable income on total housing costs, by apartment size, before and after introduction of a EUR 10 000 homebuyer's grant, by household type, based on the average transaction price in Riga, Latvia, 2018

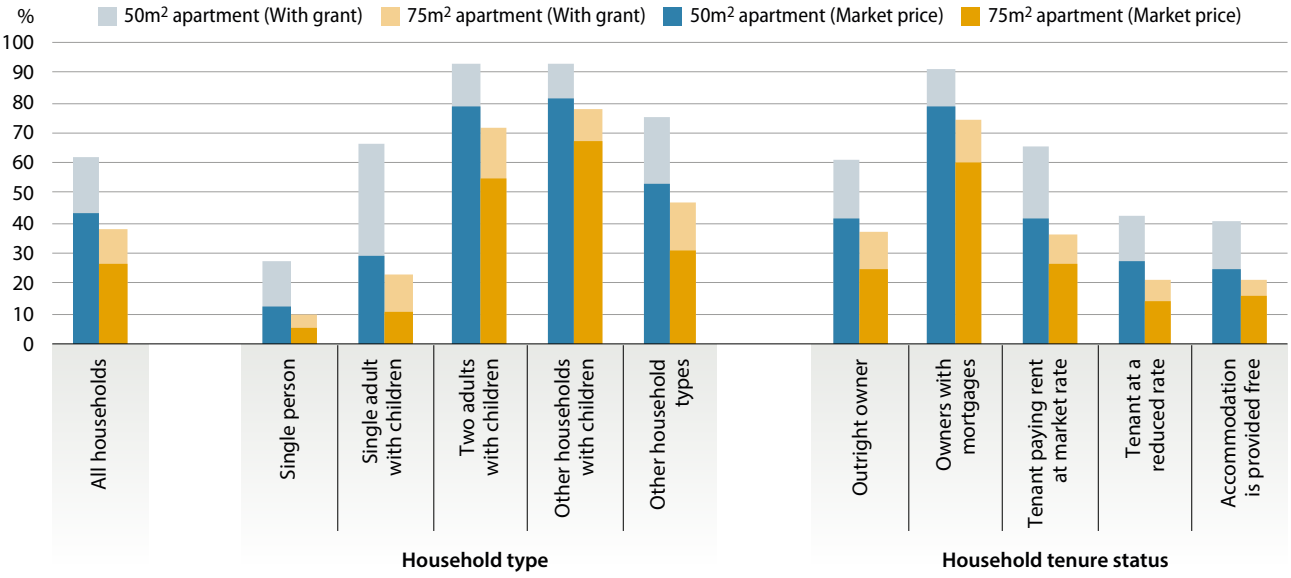


Note: "Could afford a mortgage" means that total housing costs (including utilities and maintenance) would consume less than 30% of total after-transfer household disposable income. Estimates based on the average transaction price for apartments in Riga (EUR 900 per m²), with the household in receipt of a home buyer's grant that reduces the transaction price by EUR 10,000. Annual mortgage costs estimated on the basis of a 30-year repayment mortgage with monthly payments. The interest rate is set at the 2019 average annual percentage rate of charge on loans to households (new business) for house purchase, as published by the Bank of Latvia (2.9%). This rate is assumed to remain fixed throughout the lifetime of the mortgage. Utilities and maintenance charges are assumed to cost EUR 2.5 per m² per month. It is assumed that the household already has access to a deposit worth 15% of the transaction price. For the breakdown by household types, "children" are defined as household members aged 17 or less, or household members aged between 18 and 24 that are economically inactive and living with at least one parent. The presence of a flushing toilet and the presence of leaking roof, damp walls/floors/foundation, or rot in window frame or floor are based on self-reported information by households. Household disposable incomes are OECD estimates based on information from the European Union Statistics on Income and Living Conditions (EU SILC) survey 2018.

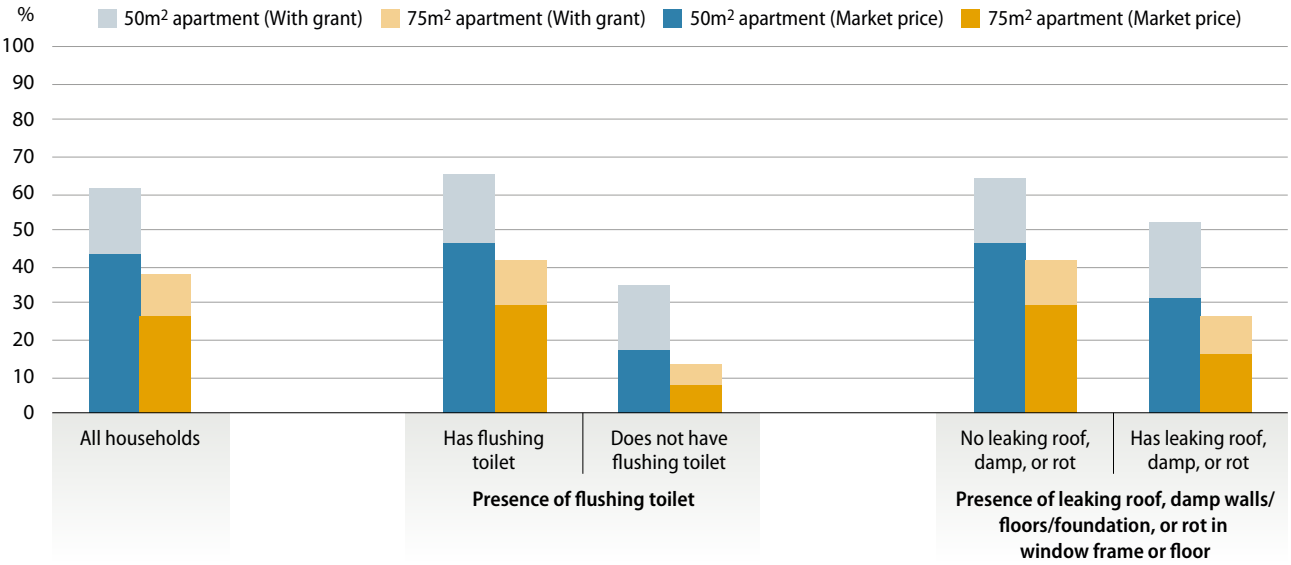
Source: OECD estimates based on the European Union Statistics on Income and Living Conditions (EU SILC) survey, Latio Residential Report: 1st Half of 2019 (http://latio.lv/en/services/market-analysis-and-review-1/housing-market), and Bank of Latvia Interest Rate Statistics (www.bank.lv/en/statistics/stat-data/interest-rate-statistics).

Figure 4.7. **A EUR 30 000 homebuyer's grant could have a much larger impact, but would be very expensive**
Illustrative estimate of the share of households that could afford a mortgage on an apartment without spending more than 30% of household disposable income on total housing costs, by apartment size, before and after introduction of a EUR 30 000 homebuyer's grant, based on the average transaction price in Riga, Latvia, 2018

Panel A: By household type



Panel B: By housing quality problems



Note: "Could afford a mortgage" means that total housing costs (including utilities and maintenance) would consume less than 30% of total after-transfer household disposable income. Estimates based on the average transaction price for apartments in Riga (EUR 900 per m²), with the household in receipt of a home buyer's grant that reduces the transaction price by EUR 10,000. Annual mortgage costs estimated on the basis of a 30-year repayment mortgage with monthly payments. The interest rate is set at the 2019 average annual percentage rate of charge on loans to households (new business) for house purchase, as published by the Bank of Latvia (2.9%). This rate is assumed to remain fixed throughout the lifetime of the mortgage. Utilities and maintenance charges are assumed to cost EUR 2.5 per m² per month. It is assumed that the household already has access to a deposit worth 15% of the transaction price. For the breakdown by household types, "children" are defined as household members aged 17 or less, or household members aged between 18 and 24 that are economically inactive and living with at least one parent. The presence of a flushing toilet and the presence of leaking roof, damp walls/floors/foundation, or rot in window frame or floor are based on self-reported information by households. Household disposable incomes are OECD estimates based on information from the European Union Statistics on Income and Living Conditions (EU SILC) survey 2018.

Source: OECD estimates based on the European Union Statistics on Income and Living Conditions (EU SILC) survey, Latio Residential Report: 1st Half of 2019 (http://latio.lv/en/services/market-analysis-and-review-1/housing-market), and Bank of Latvia Interest Rate Statistics (www.bank.lv/en/statistics/stat-data/interest-rate-statistics).

on mortgage affordability in Latvia of a relatively similar non-repayable lump sum homebuyers grant, in this case set at EUR 10 000 and EUR 30 000, respectively.

Starting with the EUR 10 000 grant, Figure 4.6 shows that, for most household types, the introduction of a EUR 10 000 grant is likely to have only a limited impact on mortgage affordability. In income terms, using the 30% of disposable income affordability threshold, the introduction of a EUR 10 000 lump sum grant would reduce the required household disposable income needed for a mortgage on a 50m^2 apartment from at least EUR 11 400 to at least EUR 10 000, and for a mortgage on a 75m^2 apartment from EUR 17 100 to EUR 15 600. Assuming, in a first instance, that the grant is made available to all Latvian households regardless of characteristics, this could increase the share of households that could afford a new mortgage on a 50m^2 apartment by about six percentage points (from 43% to 49%), and the share that could afford a mortgage 75m^2 apartment by roughly 3 percentage points (from 27% to 30%). Single-parent households could potentially benefit the most – among these households, the introduction of a EUR 10 000 lump sum could boost the share that can afford a mortgage on a 50m^2 apartment by 12 percentage points, from 29% to 41% (Figure 4.6). Across all other household and tenure types, a EUR 10 000 grant would likely boost the share of households that could afford a mortgage by at most seven percentage points.

A EUR 30 000 lump sum to homebuyers could have a much larger impact (Figure 4.7). Introducing such a grant would lower the minimum income required to afford the mortgage on a 50m^2 apartment from EUR 11 400 to EUR 7 000, and for a 75m^2 apartment from EUR 17 100 to EUR 12 800. Again, assuming in a first instance that the grant is available to all households, this could increase the share of households that can afford a mortgage on a 50m^2 apartment by 19 percentage points (from 43% to 62%), and the share that can afford a mortgage on a 75m^2 apartment by just under 12 percentage points (from 27% to 38%). The impact would be largest on single-parents and households currently renting on the private rental market: in the latter case, the share that could afford a mortgage on a 50m^2 apartment could increase by 24 percentage points; in the former, it could potentially rise by almost 37 percentage points (Figure 4.7, Panel A).

Further, financial support could be envisaged to support households with housing quality challenges. One option, for instance, could be to provide households living in poor quality housing who cannot afford to move with a lump sum that could help them afford a mortgage to change homes. In this case, a EUR 30 000 could also have a major impact on mortgage affordability for households with housing quality problems (Figure 4.7, Panel B). As just one example, providing a EUR 30 000 homebuyer's lump sum could boost the share of households with a leaking roof, damp or rot that can afford the mortgage on 50m^2 apartment by over 20 percentage points, from 32% to 52%.

Given the scale of the housing affordability and quality challenge in Latvia, the clear downside to a lump sum of this size is that it would be very expensive. Take the most extreme example first. As highlighted above, the introduction of a EUR 30 000 homebuyer's grant could potentially boost the share of households that can afford a mortgage on a 50m^2 apartment by about 19 percentage points. This covers about 150 000 households. Assuming that only these households are eligible for the grant (i.e., that coverage is restricted *just* to households that can afford a mortgage only with the assistance of the grant), and that about 10% of eligible households take up the offer, the budgetary cost to government would be roughly EUR 450 million, or approximately 1.5% of Latvia's GDP in 2019. Looser eligibility and/or higher take-up would mean costs to government would be higher.

Costs could be limited by targeting the homebuyer's grant only to specific groups or those with specific needs. For example, one group that currently struggles most with mortgage affordability, but could also benefit the most, is single parents. The introduction of a EUR 30 000 homebuyer's grant could potentially help just under 15 000 single-parent households afford a mortgage on a 50m^2 apartment. Again assuming a take-up rate of about 10%, restricting eligibility to just these single-parent households could result in a cost to government of about EUR 44 million, or about 0.15% of GDP.

A second option would be to target the homebuyer's grant only at those households currently suffering from housing problems. Providing a EUR 30 000 lump sum to households living in dwellings without a flushing toilet or with a leaking roof, damp or rot could help as many as 15 000 and 38 000 households afford a mortgage on a 50m^2 apartment, respectively, with some likely overlap between the two. Assuming that these households could be properly and reliably identified, and again assuming take-up of about 10%, restricting the grant only to those households with a leaking roof or problems with damp

or rot would produce a potential cost of roughly EUR 113 million, or just under 0.4% of GDP. Nevertheless, households facing quality problems with their current dwelling do not necessarily need to purchase and move to a new house; support for dwelling refurbishment or improvements could be a viable and less costly alternative, explored below.

Illustrative example: A government-supported low-interest loan to facilitate home ownership

An alternative that could have similar potential effects is the provision of a low-interest government loan to households that currently struggle to afford a mortgage. There are numerous country examples:

- In **Belgium**, the *Vlaamse woonlening programme* in the Flanders region offers housing loans to households falling within a minimum and maximum income threshold.[6] The programme is intended to offer an affordable housing loan to households with a modest income. The loan can be used to purchase a dwelling, preserve a home (e.g. after a divorce) and/or renovate, improve or adapt a dwelling. The interest rate depends on the income level, household size and composition, as well as dwelling location. Borrowers are not allowed to already own a dwelling or parcel intended for construction, and the dwelling must also meet minimum quality standards. More than 4 600 loans have been issued, with an average loan of around EUR 166 000.

- The **Czech Republic** offers a homebuyers loan at preferential rates to young families with children (*Program Pro mladé*), which can be used to either build or purchase a home, with limits on the maximum purchase price. Around 130 recipients received a loan in 2018, for an average amount of around EUR 60 500.

- **France** offers a zero-interest loan to first-time homebuyers who meet certain income thresholds; the average loan to households was around EUR 14 200 with nearly 894 000 people benefiting from the scheme between 2011 and 2018.

At present, the Latvian government is able to borrow at an interest rate of 0.55% through the issuing of ten-year government bonds. Passing this rate on to potential homebuyers would substantially decrease annual fixed mortgage payments for borrowers – for a mortgage on a 50m^2 apartment at average Riga prices, the annual fixed payment would be reduced by almost a quarter. A second potential advantage of a government-provided mortgage is that, if desired, the repayment period could be extended further than most commercial lenders are willing to offer (typically, 30 years). Extending mortgage duration to 40 years, for example, could also substantially reduce annual repayments. This is especially the case when twinned with a low interest rates.

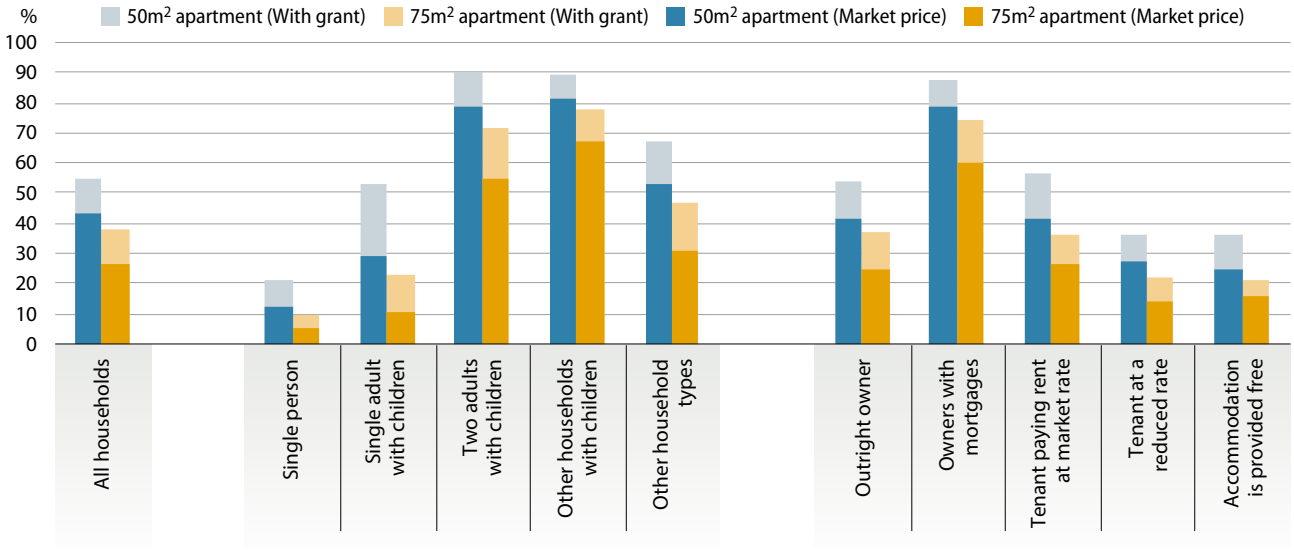
Figure 4.8 provides an illustrative example of the potential impact on mortgage affordability of a direct government homebuyer's loan. The interest rate for the potential government loan is set at 0.55% per year (as opposed to the average market rate of 2.9%), and the duration is set at 40 years (as opposed to 30 years). By reducing annual loan repayments, a direct loan would reduce the minimum income required to afford the mortgage on a 50m^2 apartment (without spending more than 30% of income on total housing costs) from EUR 11 400 to EUR 8 600, and for a 75m^2 apartment from EUR 17 100 to EUR 12 800. As in the earlier scenarios above, if the loan was made available to all households in Latvia regardless of characteristics, this would increase the share of households that could afford a mortgage on a 50m^2 apartment by about 12 percentage points (from 43% to 55%), and the share that could afford a mortgage on a 75m^2 apartment by 11 percentage points (from 27% to 38%).

Moreover, a government loan could be a particularly beneficial option to acquire larger apartments, which could be attractive for larger households. Indeed, the impact of the government homebuyer's loan on the share of households that can afford a mortgage on a 75m^2 apartment could be almost as large as the impact on the share that can afford a 50m^2 apartment. This is in contrast to the homebuyer's grant sketched above, where the grant was comparatively more successful at increasing mortgage affordability on smaller apartments. This is because, relative to a lump-sum grant, interest rate subsidies become increasingly beneficial for the borrower as the transaction price increases. A low-interest government loan is thus one way to go if one goal is to help households move into larger apartments.

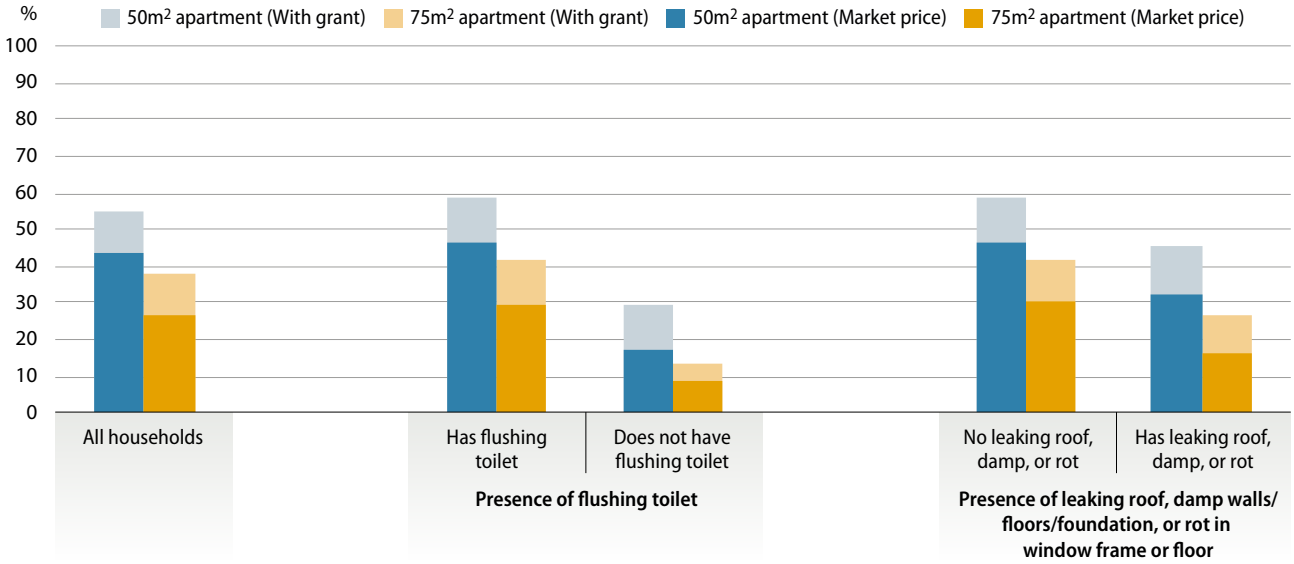
There are, of course, downsides to direct government loan provision. There are default risks and administration costs to cover, plus also the possibility that the yield on Latvia's ten-year bonds increases in future. Assuming a simple direct loan from government, the government would either have to absorb these

Figure 4.8. **A government homebuyer's loan could also help increase affordability, especially on larger apartments**
Estimated share of households that could afford a mortgage on an apartment without spending more than 30% of household disposable income on total housing costs, by apartment size, before and after introduction of a direct 40-year government loan at an interest rate equivalent to the yield on Latvia's 10-year government bonds, based on the average transaction price in Riga, Latvia, 2018

Panel A: By household type



Panel B: By housing quality problems



Note: "Could afford a mortgage" means that total housing costs (including utilities and maintenance) would consume less than 30% of total after-transfer household disposable income. Estimates based on the average transaction price for apartments in Riga (EUR 900 per m^2). Annual mortgage costs estimated on the basis of a 40-year repayment mortgage with monthly payments. The interest rate is set at the current yield on Latvia's 10-year government bonds (0.55%). This rate is assumed to remain fixed throughout the lifetime of the mortgage. Utilities and maintenance charges are assumed to cost EUR 2.5 per m^2 per month. It is assumed that the household already has access to a deposit worth 15% of the transaction price. For the breakdown by household types, "children" are defined as household members aged 17 or less, or household members aged between 18 and 24 that are economically inactive and living with at least one parent. The presence of a flushing toilet and the presence of leaking roof, damp walls/floors/foundation, or rot in window frame or floor are based on self-reported information by households. Household disposable incomes are OECD estimates based on information from the European Union Statistics on Income and Living Conditions (EU SILC) survey 2018.

Source: OECD estimates based on the European Union Statistics on Income and Living Conditions (EU SILC) survey, Latio Residential Report: 1st Half of 2019 (http://latio.lv/en/services/market-analysis-and-review-1/housing-market), and Bank of Latvia Interest Rate Statistics (www.bank.lv/en/statistics/stat-data/interest-rate-statistics).

risks/costs themselves, or cover them by increasing the interest rate offer to borrowers. The latter option would decrease the gains in terms of mortgage affordability. On the upside, a loan guaranteed by the government and, for example, provided through a special-purpose fund would not represent a government expenditure and would not weigh on the state budget, leaving more room for addressing the needs Latvia is facing.

Illustrative example: A grant or government-supported low-interest loan to support the construction of new dwellings

The high purchase price of new-build apartments in Latvia relative to household income means that few people can afford a new-build without some form of government support. Assuming construction costs for a not-for-profit developer (discussed above in the section on developing a more affordable, attractive private rental market) could be estimated at around EUR 1200 per square meter – and using 2019 average annual interest rates (2.9%) and utilities and maintenance charges that are assumed to cost EUR 2.5 per m^2 per month – a household would need an annual disposable income of at least EUR 13 500 to be able to afford the mortgage on a $50m^2$ new-build apartment without spending more than 30% of disposable income on total housing costs. For a $75m^2$ new-build, the household would need an annual disposable income of at least EUR 20 200. Without assistance, across Latvia as a whole, only 36% of households could afford the mortgage on such a $50m^2$ new-build apartment, and just 19% on the $75m^2$ new-build.

Just as for existing apartments (see above, Figure 4.7), a government lump-sum grant aimed at reducing transaction prices could improve new-build affordability for a large number of Latvian households (Figure 4.9). The grant could be given directly to the developer with an obligation to pass on the grant to homebuyers through a reduced list price, or to the homebuyer themselves. Either way, the introduction of a lump-sum worth EUR 30 000 would reduce the reduce the minimum income required to afford the mortgage on a $50m^2$ new-build (without spending more than 30% of income on total housing costs) from EUR 13 500 to EUR 9 200, and for a $75m^2$ new-build from EUR 20 200 to EUR 16 000. Based on the current distribution of income across households in Latvia, and assuming again that all households are eligible regardless of characteristics, this could increase the share of households that could afford a 50 square meter new-build by 16 percentage points – from 36% to 52% – and the share that could afford a 75 square meter new-build by about 10 percentage points – from 19% to 29%.

Among sub-populations, a EUR 30 000 grant would be particularly effective at increasing access to 50 square meter new-builds for single-parents households, though, notably, very few would be able to afford a larger 75 square meter new build even with the support of the grant. A EUR 30 000 grant could also help improve access to new builds for households currently experience housing quality problems, such as the absence of a flushing toilet, again especially with respect to smaller, 50 square meter new-builds.

As with the homebuyer's grant for existing apartments, a new-build grant of this size has the potential to carry large direct budgetary costs. Depending on the scale of programme, and assuming again that eligibility is limited to just those households that could afford a new-build with the help of the grant, the grant could help as many as around 130 000 households afford a mortgage on 50 square meter new build. At EUR 30 000 each, assuming take up of about 10%, this could produce a direct budgetary cost of about EUR 390 million, or about 1.3% of Latvia's GDP, although in this case at least a portion of the cost might be re-cooped if the grant stimulates construction activity and associated tax revenues. Wider eligibility and greater take-up would produce greater costs, while targeting the grant at specific needy groups (e.g. single parents or households with housing quality problems) would reduce costs.

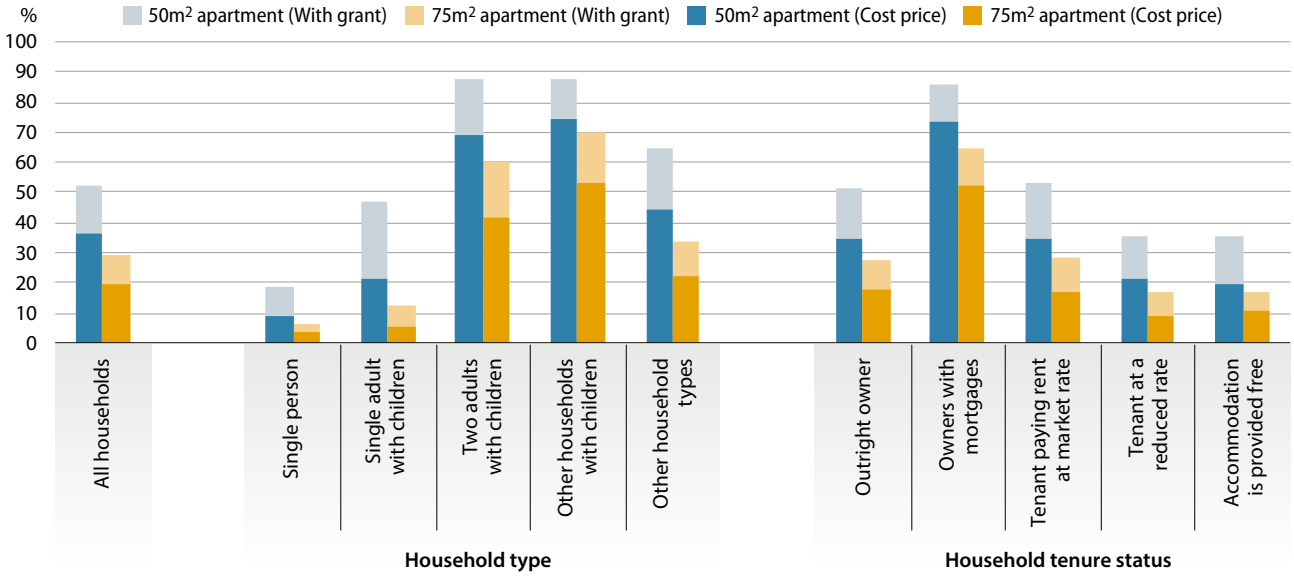
An alternative is again to consider a low-interest loan, in this case for potential homebuyers looking to purchase a new-build apartment. Using the same cost estimates as in the grant scenario above, and the same low-interest loan parameters as in earlier in this section, the provision of a low-interest government loan, the introduction of direct low-interest would reduce the minimum income required to afford the mortgage on a $50m^2$ new-build (without spending more than 30% of income on total housing costs) from EUR 13 500 to EUR 9 700, and for a $75m^2$ new-build from EUR 20 200 to EUR 14 600. This could help as many as 14% of Latvian households afford the mortgage on a new 50 square meter apartment, and about 13% afford the mortgage on a 75 square meter new-build (Figure 4.10).

Notably, as with the proposed low-interest loan for purchasing existing apartments (see Figure 4.8), a low-

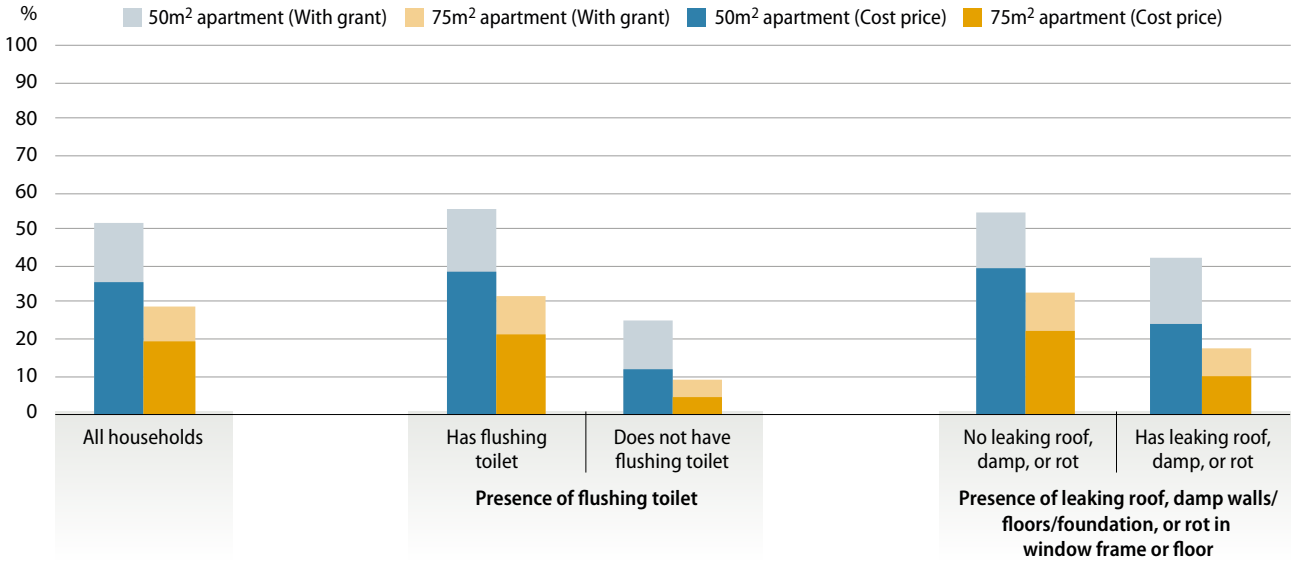
Figure 4.9. **Only a minority of Latvian households could afford the mortgage on a new build apartment, but a government grant could help**

Estimated share of households that could afford a mortgage on a new-build apartment without spending more than 30% of household disposable income on total housing costs, by apartment size, before and after introduction of a EUR 30,000 grant, based on new builds built by a non-profit organisation at a cost of EUR 1200 per m^2, Latvia, 2018

Panel A: By household type



Panel B: By housing quality problems

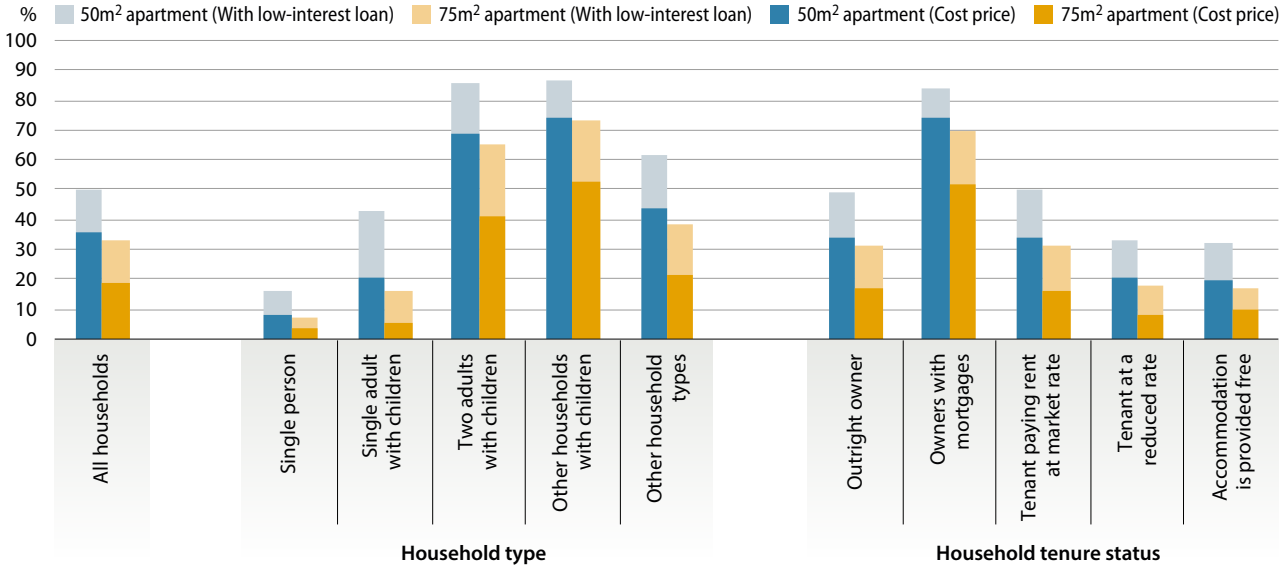


Note: "Could afford a mortgage" means that total housing costs (including utilities and maintenance) would consume less than 30% of total after-transfer household disposable income. Estimates based on the transaction price for a new-build apartment priced at EUR 1200 per m^2, with the household in receipt of a home buyer's grant that reduces the transaction price by EUR 30,000. Annual mortgage costs estimated on the basis of a 30-year repayment mortgage with monthly payments. The interest rate is set at the 2019 average annual percentage rate of charge on loans to households (new business) for house purchase, as published by the Bank of Latvia (2.9%). This rate is assumed to remain fixed throughout the lifetime of the mortgage. Utilities and maintenance charges are assumed to cost EUR 2.5 per m^2 per month. It is assumed that the household already has access to a deposit worth 15% of the transaction price. For the breakdown by household types, "children" are defined as household members aged 17 or less, or household members aged between 18 and 24 that are economically inactive and living with at least one parent. The presence of a flushing toilet and the presence of leaking roof, damp walls/floors/foundation, or rot in window frame or floor are based on self-reported information by households. Household disposable incomes are OECD estimates based on information from the European Union Statistics on Income and Living Conditions (EU SILC) survey 2018.

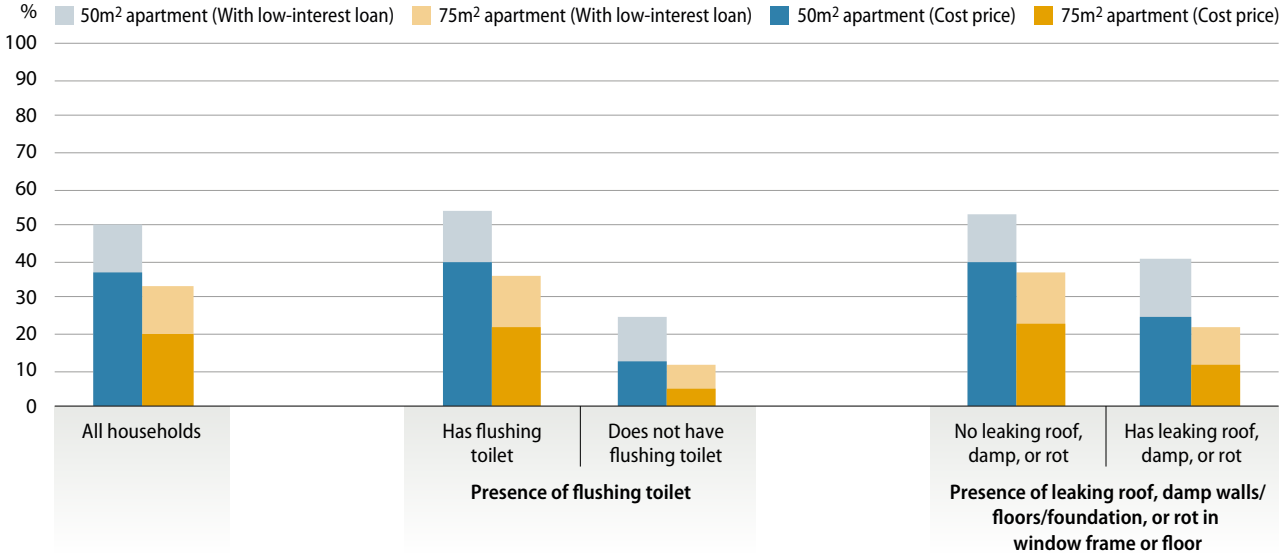
Source: OECD estimates based on the European Union Statistics on Income and Living Conditions (EU SILC) survey, and Bank of Latvia Interest Rate Statistics (www.bank.lv/en/statistics/stat-data/interest-rate-statistics).

Figure 4.10. **A government low-interest loan could also boost the affordability of new build apartments**
Estimated share of households that could afford a mortgage on a new-build apartment without spending more than 30% of household disposable income on total housing costs, by apartment size, before and after introduction of a direct 40-year government loan at an interest rate equivalent to the yield on Latvia's 10-year government bonds, based on new builds built by a non-profit organisation at a cost of EUR 1200 per m^2, Latvia, 2018

Panel A: By household type



Panel B: By housing quality problems



Note: "Could afford a mortgage" means that total housing costs (including utilities and maintenance) would consume less than 30% of total after-transfer household disposable income. Estimates based on the transaction price for a new-build apartment priced at EUR 1200 per m^2. Annual mortgage costs estimated on the basis of a 40-year repayment mortgage with monthly payments. The interest rate is set at the current yield on Latvia's 10-year government bonds (0.55%). This rate is assumed to remain fixed throughout the lifetime of the mortgage. Utilities and maintenance charges are assumed to cost EUR 2.5 per m^2 per month. It is assumed that the household already has access to a deposit worth 15% of the transaction price. For the breakdown by household types, "children" are defined as household members aged 17 or less, or household members aged between 18 and 24 that are economically inactive and living with at least one parent. The presence of a flushing toilet and the presence of leaking roof, damp walls/floors/foundation, or rot in window frame or floor are based on self-reported information by households. Household disposable incomes are OECD estimates based on information from the European Union Statistics on Income and Living Conditions (EU SILC) survey 2018.

Source: OECD estimates based on the European Union Statistics on Income and Living Conditions (EU SILC) survey, and Bank of Latvia Interest Rate Statistics (www.bank.lv/en/statistics/stat-data/interest-rate-statistics).

interest loan is often just as effective – and among some sub-populations, is more effective – at boosting the affordability of larger, more expensive apartments as it is a boosting the affordability of smaller apartments. For instance, among households that are currently renting apartments at market rates, the provision of a low-interest low would help increase the share that could afford the mortgage on 50 square meter new build by about 15.5%, and the share that could afford a 75 square meter new build by almost exactly the same amount.

Illustrative example: A government-supported low-interest loan for new-build rental dwellings

Governments can also provide low-interest loans for new-build affordable rental dwellings, either through a direct loan guarantee or through a revolving fund as recommended above. Figure 4.11 illustrates the potential impact of such a support scheme on the share of Latvian households able to rent a new-build apartment. It shows in the first instance the share of Latvian households that would be able to afford to rent a new build apartment constructed by a non-profit housing provider and offered on the rental market at *cost price*. The assumed construction cost is EUR 1200 per square meter. The non-profit provider is assumed to finance construction entirely (100%) through borrowed capital, at an interest rate equal to the 2019 average annual rate (2.9%) and a repayment duration of 30 years. The rent charged by the non-profit provider is assumed to equal their annual repayment costs plus a 2% margin to be used for reserves and an annual EUR 250 administration charge (based on the example of housing associations' revolving funds presented above 4.2.2). The renter has to cover utilities and maintenance costs themselves, at an assumed cost of EUR 2.5 per square meter, per month.

In this scenario, total housing costs ("cost price" rent plus utilities and maintenance charges) for a household looking to rent a 50m^2 new build apartment would come to about EUR 4 800 per year (EUR 400 per month, or about EUR 8 per m^2, per month). For a 75m^2 new build apartment, total housing costs would come to about EUR 7 000 per year (EUR 590 per month, or about EUR 7.9 per m^2, per month). In order to be spending less than 30% of disposable income on total housing costs, the minimum income required to rent the 50m^2 new build would be EUR 16 000 per year, and for the 75m^2 new build EUR 23 600 per year. As shown by the far left columns in Figure 4.11, only 29% of households in Latvia have sufficient income to rent the 50m^2 new build apartment, and only 14% of households have enough income to rent the 75m^2 new build apartment.

Providing non-profit housing providers with access to a government-supported low-interest loan for new-build construction could considerably lower rental costs and boost the number of households able to afford to rent new-build apartments. Using similar parameters to the low-interest homebuyer loans outlined above (a 40-year loan with an interest rate set at 0.55% - the current yield on Latvia's 10-year government bonds), a low-interest government loan could, by lowering the rent price, reduce total housing costs on a 50m^2 new build to roughly EUR 3 500 per year (EUR 288 per month, or about EUR 5.8 per m^2, per month). For a 75m^2 new build, they could fall to EUR 5 100 per year (EUR 421 per month, or about EUR 5.6 per m^2, per month). The household minimum income required to avoid spending more than 30% of disposable income on total housing costs would fall to EUR 11 500 and EUR 16 900, respectively. The share of all households with a disposable income above this minimum level (i.e. that could afford to rent the apartment without spending more than 30% of income on total housing costs) would increase to 43% in the case of the 50m^2 apartment (a 14 percentage point increase), and 27% in the case of the 75m^2 apartment (a 13 percentage point increase).

Looking across household types, a government low-interest loan for new-build rental construction is likely to be particularly helpful for families with children, especially if they are looking to rent a larger apartment. Going by the simulations presented in Figure 4.11, the introduction of a low-interest loan for new-build rentals could increase the share of two-adult-with-children households that can afford to rent a 75m^2 apartment by roughly 25 percentage points, from 30% to 55%. The low-interest loan could also be reasonably effective at boosting affordability for single-parent households looking to rent a smaller (50m^2) apartment, although still relatively few would be able to afford the larger 75m^2 apartment. Single-person households are likely to benefit less, as the large majority do not have sufficient income to afford to rent the simulated new build even after the introduction of the low-interest loan for new-build rental construction.

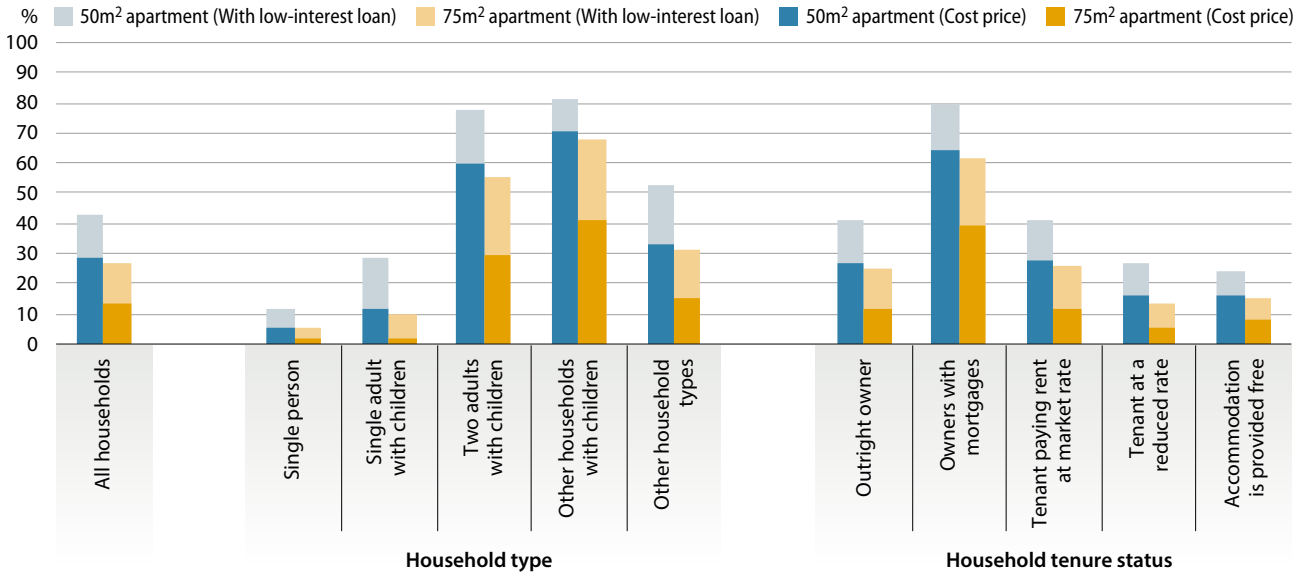
Illustrative example: A grant to households to support dwelling improvements

A number of OECD countries provide financial support to improve the quality of dwellings, which may be available to households, local governments, housing associations or other actors. Dwelling improvements can consist of technical upgrades (e.g. plumbing, roofing, etc.) as well as energy efficiency upgrades.

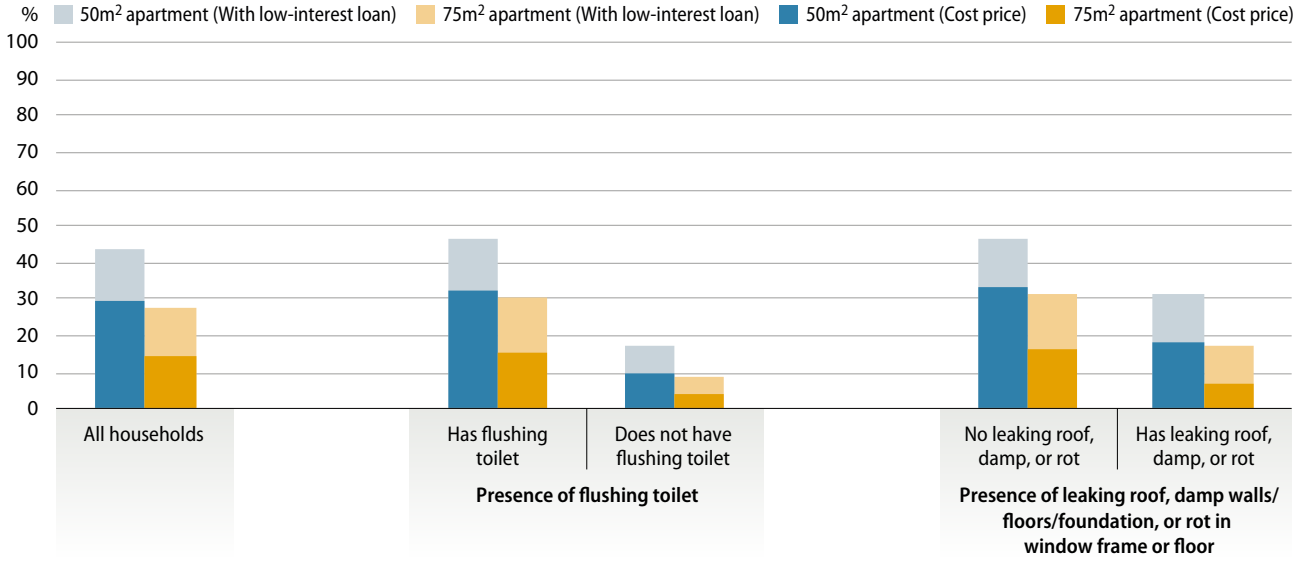
Figure 4.11. **A low-interest loan for the construction of new-build apartments by housing providers could improve the affordability of new-build rentals**

Estimated share of households that could afford to rent a new-build apartment from a non-profit provider without spending more than 30% of household disposable income on total housing costs, by apartment size, before and after the introduction of a direct 40-year government loan for new builds at an interest rate equivalent to the yield on Latvia's 10-year government bonds, based on a new build cost of EUR 1200 per m^2, Latvia, 2018

Panel A: By household type



Panel B: By housing quality problems



Note: "Could afford to rent" means that total housing costs (including utilities and maintenance) would consume less than 30% of total after-transfer household disposable income. Estimates based on an assumed construction cost of EUR 1200 per m^2. The apartment is assumed to be built by a non-profit housing provider who finance construction entirely (100%) through borrowed capital. The rent charged by the non-profit provider is assumed to equal the annual repayment cost plus a 2% margin to be used for reserves and an annual EUR 250 administration charge. Annual repayment costs estimated on the basis of a 30/40-year repayment loan with monthly payments. The interest rate in the cost price scenario is set at the 2019 average annual percentage rate of charge on loans to households (new business) for house purchase, as published by the Bank of Latvia (2.9%), and in the low-interest loan scenario at the current yield on Latvia's 10-year government bonds (0.55%). This rate is assumed to remain fixed throughout the lifetime of the loan. Utilities and maintenance charges are assumed to cost EUR 2.5 per m^2 per month. For the breakdown by household types, "children" are defined as household members aged 17 or less, or household members aged between 18 and 24 that are economically inactive and living with at least one parent. The presence of a flushing toilet and the presence of leaking roof, damp walls/floors/ foundation, or rot in window frame or floor are based on self-reported information by households. Household disposable incomes are OECD estimates based on information from the European Union Statistics on Income and Living Conditions (EU SILC) survey 2018.

Source: OECD estimates based on the European Union Statistics on Income and Living Conditions (EU SILC) survey, and Bank of Latvia Interest Rate Statistics (www.bank.lv/en/statistics/stat-data/interest-rate-statistics).

- In the **Slovak Republic**, for instance, a grant administered by the Ministry of Transport and Construction aims to modernise the existing housing stock, primarily to improve any systemic technical problems with buildings as outlined in national regulations. There is a maximum amount of the subsidy per square meter; the average amount of the subsidy is around EUR 1 200, which was used to upgrade around 1 200 dwellings. Higher levels of financial support for housing improvements (averaging around EUR 4 800 per dwelling) are available through low-interest loans, which has helped to upgrade roughly 29 000 dwellings (2019 OECD QuASH).

- In **Estonia**, the national reconstruction grant for apartment buildings, driven by concerns around energy efficiency, provides grants to owners of dwellings that were built after 1993. The amount of the grant depends on the cost of the intervention, with an average grant of around EUR 7 300 per dwelling; almost 5 000 dwellings were upgraded through the scheme in 2018 (2019 OECD QuASH).

- The **Czech Republic** administers different refurbishment programmes, namely through loans. For instance, the Panel 2013+ programme offers a loan for up to 90% of eligible renovation costs at an interest rate at least equal to the EU reference rate and repayment over up to 30 years. The amount of the loan depends on the cost of the intervention, as well as the applicant's ability to pay; the average loan was around EUR 11 000, with 51 applicants paid out in 2018 (2019 OECD QuASH). Another programme specifically targets young families with children, in the form of a 10-year loan of up to around EUR 12 000. The amount of the loan depends on the cost of the intervention, as well as the applicant's ability to pay; the average amount of the loan was close to the maximum (EUR 11 600), resulting in 165 dwellings upgraded in 2018.

A potential programme in Latvia could offer a grant of around EUR 5 000 to support some dwelling upgrades, targeting dwellings that lack minimum quality standards (e.g. flushing toilet, leaking roof). As an illustrative example, currently in Latvia, approximately 85 000 (11%) of households lack a flushing toilet (see Section 2.2.2). Assuming a take-up of 10% of eligible households enrol in the programme, providing these households with a EUR 5 000 renovation grant would cost approximately EUR 42.5 million, or roughly 0.15% of Latvia's GDP in 2019. Such support could also be used to implement energy efficiency upgrades to the housing stock. A EUR 5 000 renovation grant has been simulated here, with the understanding that some residential renovation projects could require much more extensive funding. As discussed throughout this report, a comprehensive assessment of the quality of the existing stock would be needed in order to evaluate the scale and depth of the refurbishment needs. In some cases, it may be the case that housing refurbishment would not be the most cost-effective solution, and other strategies should be pursued.

Simulating the impacts of reforms to the housing benefit

A second series of simulations explores the impacts of potential reforms to Latvia's housing benefit scheme (*Dzīvokļa pabalsts*). To recall, municipalities set amounts of housing benefit and eligibility criteria. Typically, eligibility for the housing benefit is defined in two stages. First, a family applies for the status of a "low-income family" (*maznodrošināta ģimene*), then the benefit amount is calculated based on the family income and the actual housing expenditure (up to the maximum standard housing expenditure). Municipalities can individually set income thresholds for "low income families" at or above the nationally defined income threshold for a "poor family" (*trūcīga ģimene*) of EUR 128 per month.

As such, the aim of the simulated reforms to the housing benefit is twofold: i) to increase the generosity of the housing benefit by raising benefit amounts and/or eligibility thresholds, and ii) to provide access to the benefit to a larger proportion of the population at the lower end of the income distribution and in particular, families with children, single parents, and working-age adults in unstable employment.

Two types of reforms to the housing benefit are simulated using the tax-benefit microsimulation model EUROMOD and representative data on household income and living conditions from EU-SILC (refer to Annex D for a complete description of the model, including the assumptions and interactions):

- The first set of potential reforms simulates the impacts of an increase in the standard housing expenditure covered by the housing benefit; reform scenario 1 simulates an increase by 50%, and reform scenario 2 by 100%. These reforms make the housing benefit more generous for households with housing expenses above the current thresholds. The actual housing expenditure incurred by households is based on EU-SILC and remains unchanged in both scenarios.

- A second set of potential reforms simulates the addition of an intermediate step in the calculation of the amount of the housing benefit, which would exclude a certain amount of monthly earned income before calculating the benefit amount. This reform could be particularly relevant, because an earnings disregard is already in practice in municipalities. In 2017, the amendments to the Law on Social Services and Social Assistance introduced earnings disregards (up to the amount of net monthly minimum wage) into the means test for guaranteed minimum income and housing benefits. These earnings disregards apply for 3 months in case a person in a "needy family" (*trūcīga ģimene*) starts a new employment. The reforms here propose similar earnings disregards but only for the housing benefit and on a permanent basis.

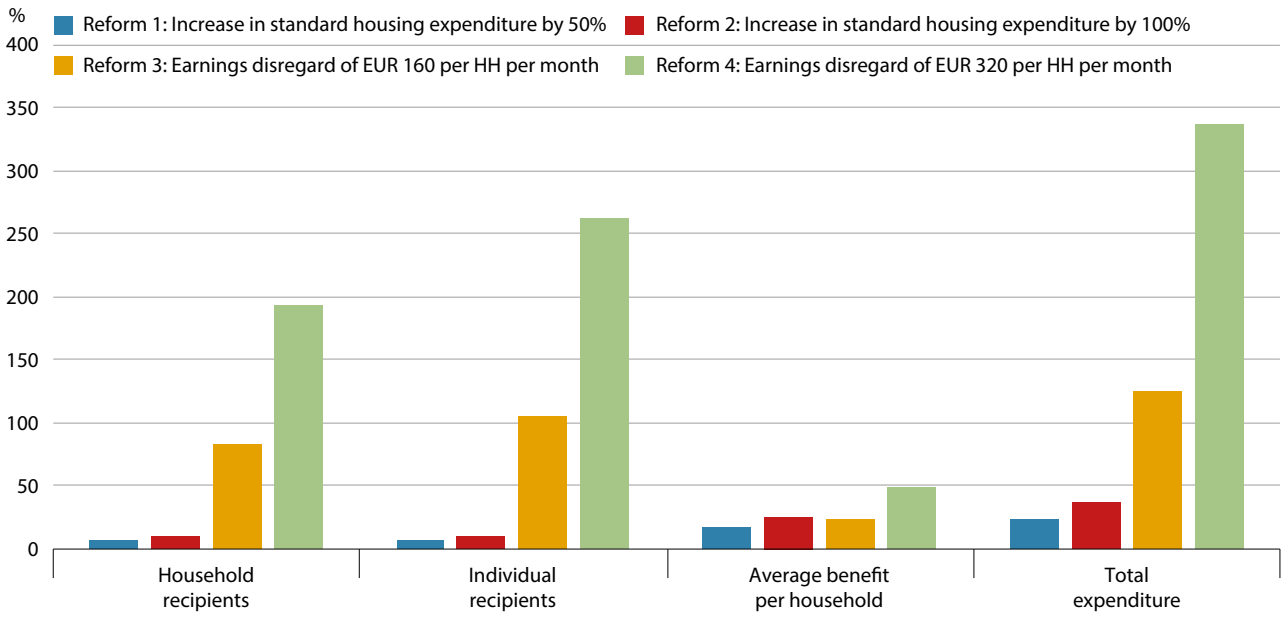
- As such, reform scenario 3 simulates an earnings disregard of EUR 160 per family per month, which is equivalent to about half of the current eligibility threshold for a working-age low-income family in Riga (which is slightly less than half of the net minimum wage for a single working-age adult). Reform scenario 4 simulates an earnings disregard of EUR 320 per family per month, which is equivalent to the current eligibility threshold for a working-age low-income family in Riga (which is slightly less than the net minimum wage for a single working-age adult).[7] These reforms make the housing benefit more accessible to families where some adults are in paid employment but have relatively low earnings.

The results of the simulation, summarised in Figure 4.12 (see also summary tables in Annex D), suggest that an earnings disregard (reform scenarios 3 and 4) would be more likely to meaningfully expand the number of beneficiaries of the housing benefit, as compared to an increase in the standard housing costs covered by the housing benefit:

- ***Overall coverage of the housing benefit:*** Reform scenarios 3 and 4 would increase the current number of households benefitting from the housing benefit by 83% and 193%, respectively, compared to only 6% and 10%, respectively, under reform scenarios 1 and 2.

- ***Average amount of the housing benefit:*** The average amount of the benefit per household could be increased by anywhere from 17% (reform scenario 1) to 49% (reform scenario 4).

Figure 4.12. **Impacts of different reform scenarios: Increase in housing benefit recipients and expenditure**
% change that could be generated under each reform scenario, compared to the current housing benefit scheme (baseline)



Note: The simulated scenarios are assessed based on microdata from EU-SILC. The baseline simulates the tax-benefit system as of 30 June 2019, including the current housing benefit scheme. The simulated reforms modify the rules of housing benefit scheme, but keep other characteristics, such as market incomes and labour market decisions, unchanged. See Annex D for further details on the simulation and assumptions.

Source: OECD calculations based on EUROMOD I2.0+. It is also possible to estimate the potential impacts of the four reform scenarios across different household types and across the income distribution:

- *Coverage of the housing benefit, by household type:* Reform scenarios 3 and 4 would facilitate coverage of the housing benefit for many more single parents, dependent children, working adults, and, to a lesser extent, seniors, compared to more negligible gains in reform scenarios 1 and 2 (Figure 4.13).

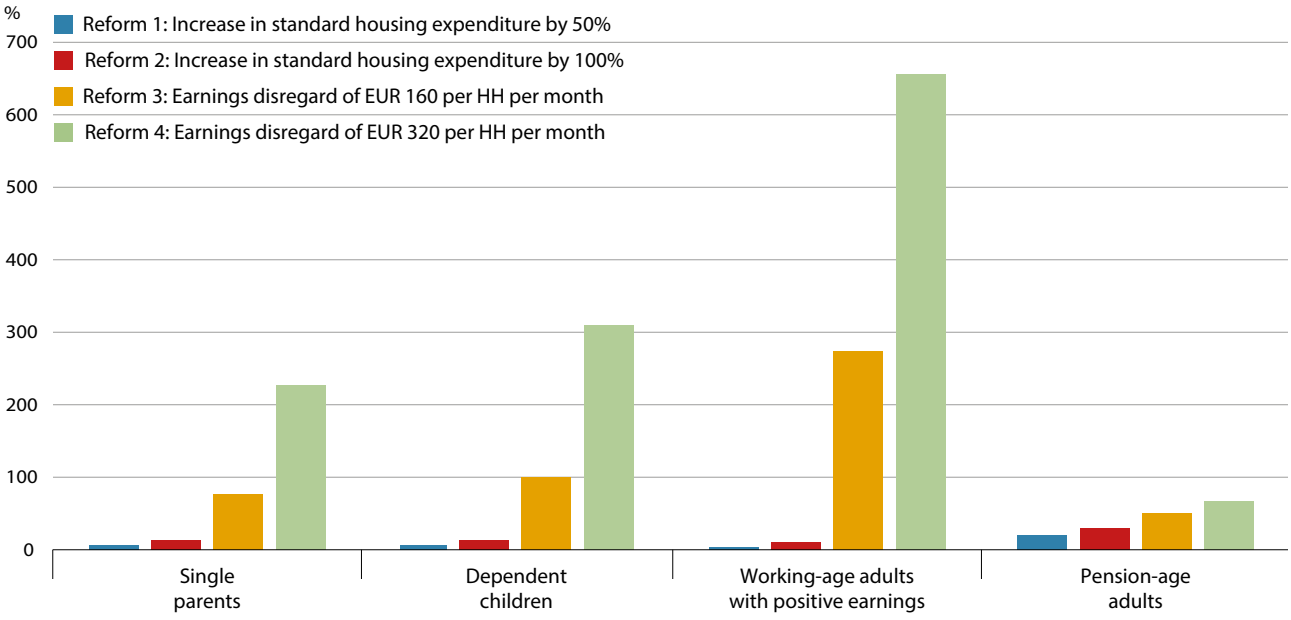
- *Coverage of the housing benefit, by income decile:* Reform scenarios 3 and 4 would enable the housing benefit to reach more households in the first, second and third income deciles, whereas scenarios 1 and 2 would only reach fewer than 15% of households in the first decile (Figure 4.14).

In terms of helping to lift people out of poverty, only reform scenario 4 would be likely to have a meaningful impact. The effect of the simulated reforms on poverty (calculated as 50% below the median income level) is not particularly strong overall, since many housing benefit recipients are situated in the first decile, whereas the poverty line is between the second and third deciles. Reform scenario 4 would generate a reduction in the poverty rate by around 1 percentage point, lifting roughly 19 000 people (around 8 800 households) out of poverty; the effect of the other reform scenarios on poverty is smaller (less than 2 200 people under reform scenario 3 and even fewer under scenarios 1 and 2).

Further, the results from these different reform scenarios help to illustrate that an earnings disregard, rather than an increase in the threshold for reasonable housing costs, would be more impactful to boost support for poor Latvian households. Under reform scenarios 1 and 2, an increase in reasonable housing costs by 50% (reform 1) or 100% (reform 2) does not increase coverage substantially and only slightly increases the benefit amount; this suggests that many poor households have housing expenses that are close to the currently defined reasonable housing costs. An earnings disregard – which in practical terms is equivalent to an increase in the amount of resources that a poor family can keep for other needs beyond housing – would result in a higher coverage and more meaningful levels of housing support for poor households. The results of the EUROMOD simulation would nonetheless need to be further explored with a larger sample size and, where feasible, more granular data on household housing costs and regional housing benefit rules.

In terms of the financial implications of such reforms, it is clear that scenarios 3 and 4 would require considerably

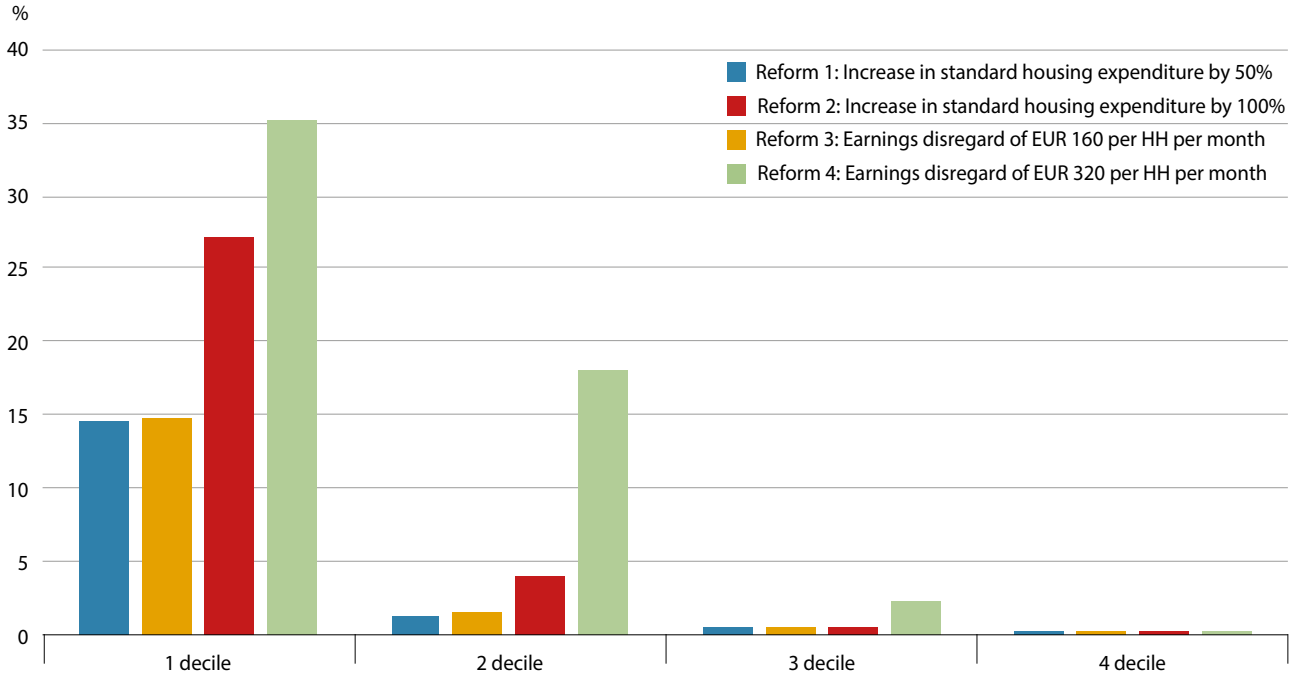
Figure 4.13. **Impacts of different reform scenarios: Increase in housing benefit recipients by household type**
% change that could be generated under each reform scenario, compared to the current housing benefit scheme (baseline)



Note: Household disposable income is equivalised using square root of household size; the poverty line is at 50% of household disposable median income. Poverty line is fixed in the baseline. See Annex D for further details on the simulation and assumptions.

Source: OECD calculations based on EUROMOD I2.0+.

Figure 4.14. **Impacts of different reform scenarios: Increase in housing benefit recipients by income decile**
% change that could be generated under each reform scenario, compared to the current housing benefit scheme (baseline)



Note: Household disposable income is equivalised using square root of household size. Income deciles are fixed in the baseline. See Annex D for further details on the simulation and assumptions.

Source: OECD calculations based on EUROMOD I2.0+

more resources than are currently allocated for housing benefits (around EUR 14.9 million in 2018). Concretely, reform scenario 3 would call for more than doubling current spending on the housing benefit, while scenario 4 would require an increase of over 300% compared to current levels. Meanwhile, reform scenarios 1 and 2 would call for a much more modest increase in spending (roughly 24% and 37%, respectively), compared to current levels, but would result in similarly modest changes to the coverage of the housing benefit. Nevertheless, it is worth pointing out that even under the most generous scheme simulated (scenario 4), Latvia's spending on housing benefits would still remain well below the OECD average of 0.3% of GDP: up to 0.17% of GDP (scenario 4), 0.09% of GDP (scenario 3) or 0.05% of GDP (scenarios 1 and 2), compared to the baseline of 0.04% of GDP.

KEY CONSIDERATIONS ON PRIORITY ACTIONS

In sum, the Latvian authorities could consider the following actions to boost housing affordability and quality:

- **Define policy objectives, identify target groups, and develop a monitoring framework.** It will be important to identify the primary housing policy objectives as well as the groups who should be targeted for support. First, this implies taking a holistic view of housing policies and the different policy areas that affect – and are affected by – housing. This may include, for instance, the framework conditions (such as property tax, the taxation of vacant or rental properties, or the broader regulatory environment, among others) that play a role in shaping incentives to households and housing developers and investors. It is also important to distinguish between housing policy objectives and those that relate to other areas of social or economic policy, such as increasing the fertility rate or addressing emigration, which could be better achieved through policy measures outside the realm of housing. Second, policy makers will need to determine which groups should be targeted by housing support, which could include households who fall into the "missing middle" of current housing support schemes (discussed further below). Establishing clear objectives and target groups can set the stage to develop a monitoring framework that can help policy makers evaluate the impact of different measures and the extent to which they are reaching their intended target groups (a more complete discussion can be found in Glocker and Plouin, 2016[90]).

- **Set up a revolving fund that could provide cheap long-term financing for new housing developments and maintenance through loans.** The fund could finance new developments and maintenance through government-guaranteed loans and private loans. Financing periods can span over 50 years at a lower-than-market rate. A share of the rents could be used to pay back the loans. Rents could then be adjusted as the loans are repaid. Even after the loans are repaid, rents could contribute to the fund to help finance new developments and maintenance. A small mark-up could be added to the rents to build savings and maintenance (for example, in Austria housing associations charge a 3.5% interest on equity investment and 2% mark-up for risk mitigation). Operating costs for administering the fund would be relatively limited and included in the rents.

- **Consider different strategies to close the gap among the "missing middle" households, identifying the different policy measures that have the greatest potential to achieve the objectives**. To recall, fewer than half of all households in Latvia can currently afford a commercial mortgage on a 50m^2 apartment without spending more than 30% of their disposable income on housing costs; only 27% of households could afford the mortgage on a 75m^2 apartment (Chapter 2). Drawing on some of the simulations presented in this chapter, a range of strategies could be envisaged to support households in accessing quality, affordable housing, including demand-side support (housing allowances), as well as supply-side support (provision of social housing, grants, loans, etc.).

  – ***For households across the income distribution***, housing refurbishment programme could provide financial support to conduct structural and technical upgrades (e.g. plumbing, roofing), as well as energy efficiency upgrades. Such support could benefit households across the income spectrum, and as demonstrated in the illustrative simulations in this chapter, this type of scheme would be an efficient use of public resources and help improve housing quality for a large share of the population.

  – ***For households at the lower end of the "missing middle,"*** reforms could be considered to the housing benefit scheme, in order to increase both the coverage and amount of the benefit. Drawing on the illustrative reform scenarios presented in this chapter, the introduction of an earnings disregard could be a meaningful first step. Another important means of support for low-income and vulnerable households would be to increase investment in the social housing stock, which could include both upgrades to the existing stock, as well as the construction of new social housing. Currently, Latvia's social housing stock is among the smallest in the OECD.

  – ***For households in the middle to upper end of the "missing middle":*** Some moderate-income households – particularly families – could benefit from increased housing support, through an expansion of the current mortgage guarantee programme or the introduction of new support measures simulated in this chapter. In addition to financial support schemes to facilitate home ownership, these households could be accommodated by rental and owner-occupied housing developed by non-profit and co-operative providers, which would be less expensive to access than the current requirements for moderate-income households to obtain a commercial loan.

- **Improve data on housing, by conducting a comprehensive assessment of the state of the housing stock**. A number of challenges facing the Latvian housing stock are not well understood. The Latvian authorities could build on the audit of a portion of the housing stock, and find inspiration in housing surveys that have been undertaken in Canada, France a the Slovak Republic (among many others), in order to assess: i) the (technical) quality of housing; ii) the share of housing that is currently vacant, as well as the reason for the vacancy (Mexico's experience in undertaking a detailed assessment of the country's high vacancy rate of housing over the past decade could be an especially relevant example for Latvian policy makers; see (OECD, 2015[91]); iii) household spending on housing; and iv) housing constraints and preferences of households (e.g. with respect to changing residences, etc.). Such data collection efforts could also contribute to more detailed regional housing data, which are currently lacking. One straightforward approach could be to adapt the housing questions in EU-SILC to a national housing survey that would capture the full housing stock, or a larger sample size. Such an assessment could go a long way to understanding the needs of Latvian households, as well as tracking the government's progress in improving housing conditions over time.

Modern lowrise apartments in Jurmala

Access to affordable housing means being able to afford a decent dwelling of a minimum acceptable standard.

Annex A. Metrics of housing affordability

Housing-price-to-income ratios

Constrained by the availability of data and the need for easily-interpretable metrics, many authorities rely on relatively simple house-price-to-income measures. House-price-to-income ratio measures (and their siblings, rent-price-to-income ratio measures) are a relatively straightforward way to measure housing affordability. Several international organisations, including the OECD, as well as many national authorities (e.g. Australia, Ireland, and the United Kingdom) publish house-price-to-income ratio statistics (Table 2.1), sometimes as a main economic indicator as well as a measure of housing affordability.

The attractiveness of price-to-income ratio measures lies in the fact that they are simple, intuitive, and in most countries readily available. The measure is generally calculated using a nominal house (or rent) price index, divided by average disposable income. It can show, at the aggregate level, how the association between prices and income varies over time and/or across markets, such as across countries. If housing (rent) prices increase faster than incomes, the price-to-income ratio would suggest that housing is becoming less affordable on average; if incomes rise faster than housing prices, the ratio would suggest that housing is becoming more affordable.

From a policy perspective, price-to-income ratios are useful as a summary statistic but have their limits. In particular, because they are calculated at the aggregate level, price-to-income ratios say little about the distribution of housing costs and housing affordability. They also cannot provide information on *who* does and does not have access to affordable housing, and *why*, nor do they provide any indication of the *quality* of housing that households are paying for.

Housing-expenditure-to-income ratios

Housing-expenditure-to-income ratio-based measures are closely related to price-to-income ratio measures, but focus on actual housing spending at the individual household level, instead of prices at the aggregate level. Several authorities (e.g. Australia, Canada, the Netherlands, New Zealand, Switzerland and the United States), as well as the OECD and Eurostat, use expenditure-to-income ratio measures to capture housing affordability, sometimes in combination with other measures (Table 2.1). Housing costs can refer to either a narrow definition, based on rent and mortgage costs (principal repayment and mortgage interest), or, alternately, a wider definition that also includes the costs of mandatory services and charges, regular maintenance and repair, taxes and utilities, which may be referred to as "total housing costs" (see OECD Affordable Housing Database, Indicator HM1.2).

A common price-to-income ratio used in many jurisdictions is a 30% affordability threshold, whereby housing is considered "affordable" if households are not spending more than 30% of their disposable income on housing costs. The choice of 30% in an arbitrary one, and has evolved over time: in the United States, for instance, the maximum affordable rent for federally subsidised housing was set at 20% of income in the 1940s, adjusted to 25% in 1969, and revised to 30% of income in 1981. The indicator, while widely used, nonetheless has limits, including its "rigid uniformity" and validity over time in a diverse and evolving housing market (Herbert, Hermann and Mccue, 2018[92]).

Another common expenditure-to-income ratio measure is the "housing cost burden", calculated as household housing expenditure over household disposable income. This gives the share of household disposable income consumed by housing. Because in most cases the primary interest is in capturing households that spend an unacceptably large share of income on housing, the measure is often transformed and presented as the share of households with a housing cost burden above a given threshold – the so-called "overburden rate" (see Figure 2.2). Both Eurostat and the OECD set the overburden threshold at 40% of household disposable income (net of housing allowances), suggesting that households spending more than 40% are overburdened by housing costs.

Similar to price-to-income ratios, expenditure ratio measures benefit from being simple and in most cases readily available. They are based on a concept – the share of household income that is spent on housing – that is easily understandable. For many countries, including Latvia, the underlying data needed (household housing expenditure and household disposable income) are also easily available through household surveys such

as the European Union's Statistics on Income and Living Conditions (EU SILC) survey. And unlike price-to-income measures, because they are computed at the individual household level, expenditure ratios measures can be disaggregated and used to identify the different types of households are struggling with affordability – data permitting, these can include disaggregation across different tenure types (owners and renters), across the income distribution, across ages and household types, and across regions.

However, expenditure ratio measures also have their drawbacks. For example, on their own, they say little about housing quality and changes in housing quality over time (Gabriel et al., 2005[13]; Stephen Ezennia and Hoskara, 2019[8]). Some researchers are critical of overburden rate measures specifically, since the overburden threshold is typically set at an arbitrary level that remains fixed regardless of the household's characteristics or their position in the income distribution (Gabriel et al., 2005[13]; Stone, 2006[93]; Kutty, 2005[94]; Stone, Burke and Ralston, 2011[95]). For instance, for very low-income households, an overburden rate of, for instance, 40% is not ultimately very useful for policy makers: 40%, compared to 20% or even 50% of a very low income will not provide access to affordable housing in areas facing housing pressure.

It is possible to overcome some of these weakness using "modified" expenditure-to-income ratio measures. For example, when calculating the overburden rate, the OECD uses *equivalised* housing expenditure and *equivalised* household disposable income to adjust for the fact that larger households need greater resources but also benefit from economies of scale. (See the note on "What are equivalence scales?" in the *OECD Income Distribution Database* (www.oecd.org/social/income-distribution-database.htm) for more detail on equivalence scales.)

Residual income measures

Residual income measures of housing affordability were developed by affordable housing researchers to combat several perceived shortcomings of expenditure-to-income ratios (Gabriel et al., 2005[13]; Stone, 2006[93]; Kutty, 2005[94]; Stone, Burke and Ralston, 2011[95]). Residual income measures focus specifically on the level of income a household has left *after* paying for housing costs, based on the rationale that what really matters to households is not what share of income is spent on housing, but rather whether they have sufficient income left for non-housing expenses after paying for housing. There are several variants. Perhaps the most famous is Stone's "shelter poverty" indicator (Stone, 2006[93]; Stone, Burke and Ralston, 2011[95]), which measures whether a household's after-housing-cost disposable income is sufficient to cover a minimum basket of non-housing expenses. Alternatives include Kutty's "housing-induced poverty" measure, which looks at whether a household's after-housing-cost disposable income is above or below an adjusted poverty line (Kutty, 2005[94]).

Residual income measures are less frequently used by authorities than price-to-income and expenditure-to-income measures. However, New Zealand publishes statistics on the after-housing-cost residual income levels of households as part of their housing affordability indicators (Stats NZ Tatauranga Aotearoa, 2020[96]). The United Kingdom also publishes after-housing-cost poverty rate measures that, while not focused specifically on measuring housing affordability, conceptually share some similarities with residual income affordability measures (DWP, 2019[97]).

Residual income measures are particularly useful for measuring affordability among vulnerable low- and middle-income households. They produce an indicator that explicitly identifies households that are struggling to get by, regardless of household or tenure type.

However, residual income measures have limitations. Similar to expenditure-to-income ratio-based measures, they suffer from arbitrariness, in this case because there is no straightforward way to quantify the minimum income households need for non-housing expenses (Gabriel et al., 2005[13]; Stephen Ezennia and Hoskara, 2019[8]). They also again say little about housing quality, and, from a practical point of view, can require extensive additional data collection (Gabriel et al., 2005[13]; Stephen Ezennia and Hoskara, 2019[8]). This is especially the case for measures like Stone's "shelter poverty" indicator, which requires information on the cost of the minimum basket of non-housing expenses that households should be able to afford after housing costs.

Most critically, however, there is some danger that residual income measures can end up misdiagnosing general cost-of-living problems as cost-of-housing problems. While it is difficult to argue against the principle that a household's after-housing-cost income should cover at least a basket of essential expenses, it is possible that an inability to afford these other

essentials may be driven as much or more by the cost of other essentials themselves than by the cost of housing. Indeed, it is theoretically possible that a household receives housing for free but still not cannot afford other essential expenses. From a policy perspective, then, there is a risk that residual income measures may obscure or misdiagnose the real issue at hand.

Housing quality measures

None of the above measures comprehensively capture housing affordability on their own. Housing affordability is about more than just the price paid for housing: having access to affordable housing means being able to afford a decent dwelling of a minimum acceptable standard. Measuring housing affordability, then, also involves measuring what households are *paying for* in terms of housing quality and standards.

Housing quality can be measured in different ways. Both the OECD and Eurostat, for instance, use the "overcrowding rate" to capture whether dwellings provide households with sufficient space. The overcrowding rate measures the number of rooms per household member, taking into account different factors of household composition. The definition of overcrowding is based on the EU-agreed definition (Eurostat, 2018[98]), which measures the number of rooms per household member, taking into account different factors of household composition. For a full explanation, see: www.oecd.org/els/family/HC2-1-Living-space.pdf.

The OECD also publishes statistics on housing conditions and "housing deprivation rates", to measure maintenance deficiencies (such as a leaking roof, damp walls, floors or foundation, or rot in window frames and floor) and the absence of other essentials, such as sanitary facilities. Canada complements their housing affordability indicators with measures of "dwelling conditions", which use household survey data to capture whether dwellings are in need of repair. The United States and France include information on the size, age and type of dwellings, while New Zealand uses measures of overcrowding.

Measuring housing affordability involves measuring what households are paying for in terms of housing quality and standards.

Annex B. Characteristics of housing allowances in selected OECD countries

Table 4.2. Availability across tenures and details on eligibility

		Available to:				Detail on eligibility:	
	Measure name	HO	SR	PR	Other	Income thres-hold	Other eligibility criteria
Austria	Needs-based minimum benefit (BMS)	No	Yes	Yes	Yes	Yes	Recipients of needs-based minimum benefit scheme, willing to or looking for work. Available to Austrian citizens and persons with equal status.
	Housing allowance *(Wohnbeihilfe)*	No *(only in some provinces)*	Yes	Yes	No	Yes	In some provinces a minimum net-income per month is required. Furthermore, not available to tenants with family relationships to lessors
	Rental benefit *(Mietbeihilfe)*	No	Yes	Yes	No	Yes	Reserved for recipients of pension or minimum income scheme benefits, Mietbeihilfe is paid in addition to Wohnbeihilfe if the amount of the rent leads to a total income below a certain level
Denmark (1)	Housing benefit *(Boligstøtte)*	Yes*	–	Yes	No	No	Housing benefit is granted after an objective calculation based on the housing expenditure, the income of the household, the area of the dwelling and the composition of the household, including the presence of children (Consolidated Act No 48 of 16 January 2019 on individual Housing Benefits).
	Housing benefit – for pensioners *(Boligydelse)*	Yes*	Yes	Yes	Yes*	No	Only for recipients of old age pension and disability benefits according to pension rules implemented until January 2003
Estonia	Housing costs under Subsistence benefits *(Toimetulekutoetus)*	Yes	Yes	Yes	Yes *(e.g. persons living rent-free but paying utilities)*	Yes	The benefit is granted to persons legally registered as residents, if the income after payment of housing costs is below the subsistence level.
Germany	Housing allowance *(Wohngeld nach dem Wohngeldgesetz)*	Yes	Yes	Yes	Yes	Yes	In addition to income, wealth is also taken into consideration in assessing eligibility. It is possible that individuals in a household receive different forms of housing benefits, but only person can benefit from one form of housing benefit at a time.
	Costs for housing and heating under unemployment benefit II *(Arbeitslosengeld II, Sozialgeld)*	Yes	Yes	Yes	Yes	Yes	Recipients of unemployment benefits. Benefits are only granted insofar as applicants are in need and they are not able to secure their livelihood from their own income or property.
	Housing and heating costs under social assistance *(Hilfe zum Lebensunterhalt / Grundsicherung im Alter und bei Erwerbsminderung)*	Yes	Yes	Yes	Yes *(living in institut-ional care)*	Yes	Recipients of social assistance (targeted at elderly persons and people with disabilities). Benefits are only granted insofar as persons in need are not able to secure their livelihood from their own income or property.
Hungary	Home maintenance aid	Yes	Yes	Yes	–	Yes	Family or individual who lives in a home not exceeding specified size limits, and whose property (real estate excluding the dwelling where the claimant lives, and vehicles) has a value below a given maximum ceiling

		Available to:				Detail on eligibility:	
	Measure name	HO	SR	PR	Other	Income thres-hold	Other eligibility criteria
Hungary	Housing allowance *(Lakhatási támogatás)*	No	Yes	Yes	–	No	The benefit is available from local employment services to those who find a job (for a minimum period of 6 months and at least for 20 hours/week) after a period of unemployment. The housing allowance is granted if the workplace is further than 60 km from the applicant's residence. The applicant must have been registered as job-seeker for at least 1 month. The benefit is on a temporary basis, up to 12 months.
Ireland	Housing Assistance Payment	No	No	Yes	–	Yes	Any household assessed as eligible for social housing is immediately eligible for housing support through the Housing Assistance Payment (HAP) scheme. Once a household has been deemed eligible for social housing support, it is a matter for the local authority to examine the suite of social housing supports available, including the HAP scheme, to determine the most appropriate form of social housing support for that household in the administrative area of that local authority.
Latvia	Housing benefit *(Dzivokla pabalsts)*	Yes	No	Yes	–	Yes	Housing costs and rules defining whether a family or a person is eligible to receive the benefit vary by municipality.
Lithuania (2)	Compensations for heating of a dwelling, hot and drinking water costs *(Busto šildymo išlaidu, geriamojo vandens išlaidu ir karšto vandens išlaidu kompensacijos)*	Yes	Yes	Yes	–	Yes	Claimants must meet the requirements of the Law of the Republic of Lithuania on Cash Social Assistance for Poor Residents, relating to the value of assets and any debts accrued for heating or water have concluded in a repayment agreement with the provider(s).The benefit is granted if: i) the costs of heating is more than 20% of the difference between the beneficiary's income and the State Support Income (EUR 102) provided to a household or person living alone; ii) the costs of drinking water is more than 2% of the beneficiary's income; iii) the costs of hot water is more than 5% of the beneficiary's income.
	Compensation for part of lease pa+C67yment *(Busto nuomos mokescio dalies kompensacija)*	–	–	Yes	–	Yes	Depending on the municipalities: persons and families who lost their homes because of force majeure, large families, and disabled people.
Luxembourg	Rental subsidy *(Subvention de loyer)*	No	No	Yes	No	Yes	Only for tenants in the private rental market. The rent must exceed more than 25% of the income and the applicant must not be owner of a dwelling in Luxembourg or abroad.
	Accommodation allowance *(Accueil gérontologique)*	–	–	–	Care centres for the elderly	Yes	Allowance for low-income people living in care centres for the elderly.
Netherlands	Housing benefit *(Huurtoeslag)*	No	Yes *(if the rent is below max rent level)*	Yes *(if the rent is below max rent level)*	No	Yes	Maximum rent levels apply, based on household size/ composition and age.
Poland	Housing allowance *(Dodatek mieszkaniowy)*	Yes	Yes	Yes	Yes	Yes	Applicants must meet income threshold (below 175% of the minimum retirement pension for a single person, and below 125% of the minimum retirement pension per capita for a family), and dwelling must conform to space limits adjusted for household size/composition.

HO = *home owners;* SR = *tenants in social rental housing;* PR = *tenants in private rental housing;* Other = *residents in other types of tenures*

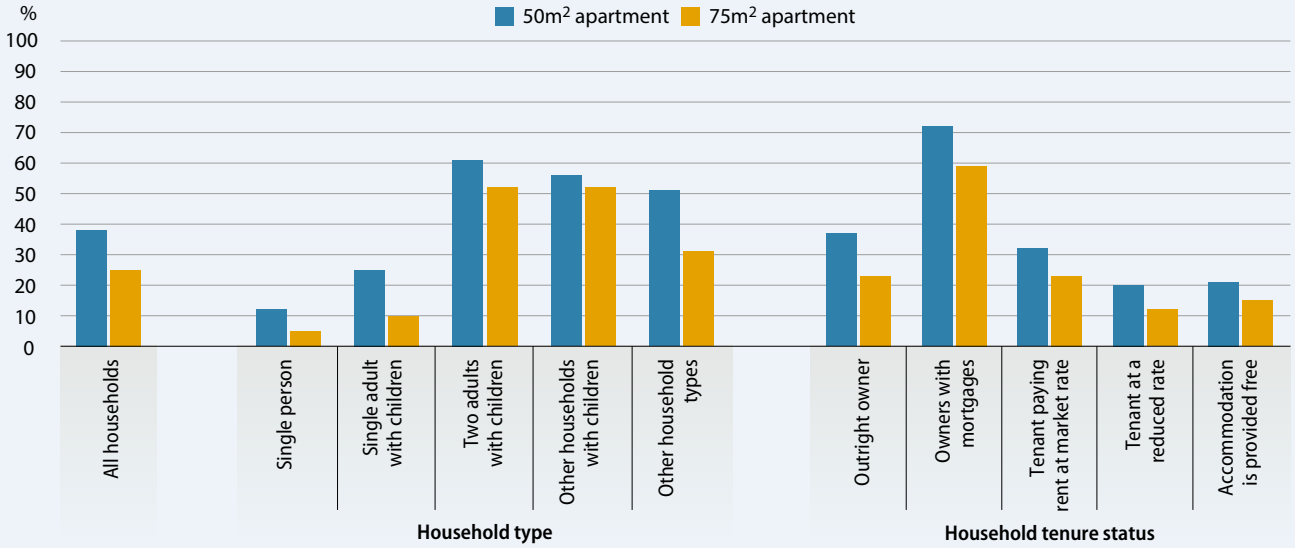
Notes: (1) In Denmark, homeowners can only receive housing benefit as a repayable loan. People living in institutional dwellings cannot receive Boligydelse. (2) Information for Compensation for part of lease payment in Lithuania refer to country responses to the 2016 OECD Questionnaire on Affordable and Social Housing (QuASH). Information for all other countries refer to 2019 OECD QuASH. Supplemental information was also taken from the country policy descriptions in the OECD Tax-Benefit Database (www.oecd.org/social/benefits-and-wages).

Source: OECD Affordable Housing Database, Indicator PH3.2

Annex C. Additional tables and figures

Figure A C.1. Mortgage affordability by household type, after testing for after-mortgage-cost residual disposable income per person

Estimated share of households that would be eligible for and could afford a mortgage on an apartment without spending more than 30% of household disposable income on total housing costs, by apartment size, based on the average transaction price in Riga, Latvia, 2018

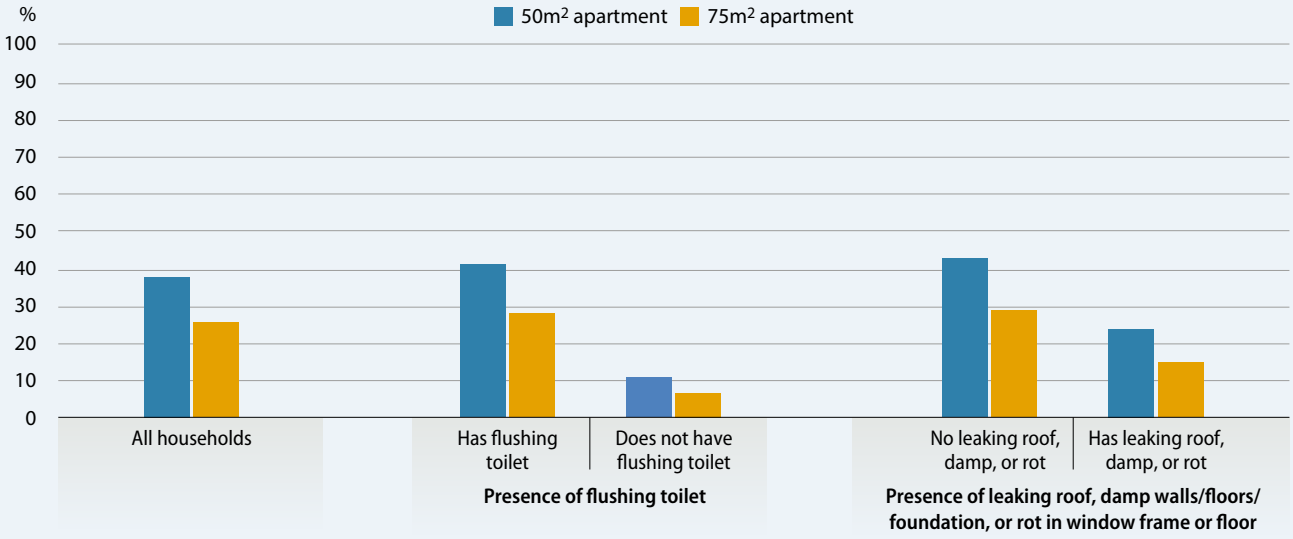


Note: This figure is an alternative version of Figure 2.6. "Eligible for and could afford a mortgage" means that the household would pass a EUR 300 per person residual income test for a commercial mortgage (i.e. the household would have a disposable income of at least EUR 300 per person per month left after mortgage costs), and that total housing costs (including utilities and maintenance) would consume less than 30% of total after-transfer household disposable income. Estimates based on the average transaction price for apartments in Riga (EUR 900 per m^2). Annual mortgage costs estimated on the basis of a 30-year repayment mortgage with monthly payments. The interest rate is set at the 2019 average annual percentage rate of charge on loans to households (new business) for house purchase, as published by the Bank of Latvia (2.9%). This rate is assumed to remain fixed throughout the lifetime of the mortgage. Utilities and maintenance charges are assumed to cost EUR 2.5 per m^2 per month. It is assumed that the household already has access to a deposit worth 15% of the transaction price. For the breakdown by household types, "children" are defined as household members aged 17 or less, or household members aged between 18 and 24 that are economically inactive and living with at least one parent. Household disposable incomes are OECD estimates based on information from the European Union Statistics on Income and Living Conditions (EU SILC) survey 2018.

Source: OECD estimates based on the European Union Statistics on Income and Living Conditions (EU SILC) survey, Latio Residential Report: 1st Half of 2019 (http://latio.lv/en/services/market-analysis-and-review-1/housing-market), and Bank of Latvia Interest Rate Statistics (https://www.bank.lv/en/statistics/stat-data/interest-rate-statistics).

Figure A C.2. Mortgage affordability by housing quality problems, after testing for after-mortgage-cost residual disposable income per person

Estimated share of households that would be eligible for and could afford a mortgage on an apartment without spending more than 30% of household disposable income on total housing costs, by apartment size, based on the average transaction price in Riga, Latvia, 2018



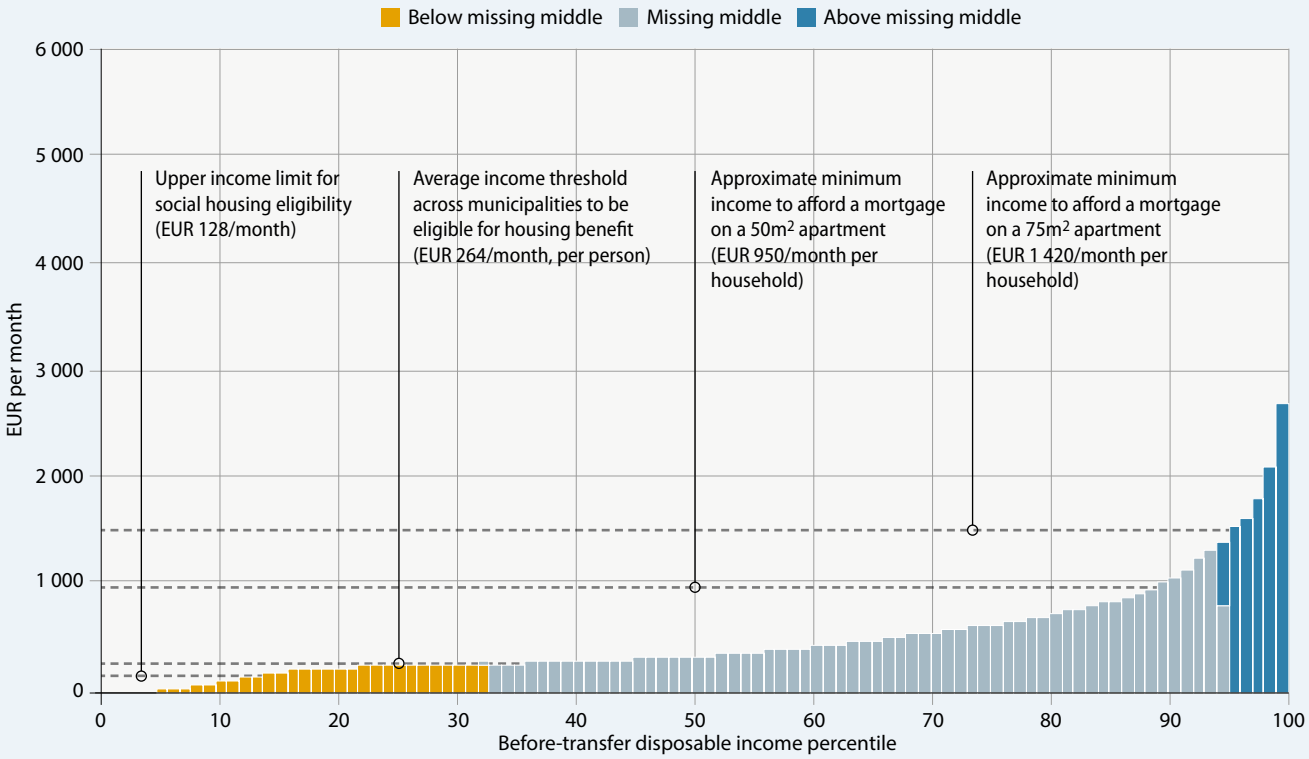
Note: This figure is an alternative version of Figure 2.13. "Eligible for and could afford a mortgage" means that the household would pass a EUR 300 per person residual income test for a commercial mortgage (i.e. the household would have a disposable income of at least EUR 300 per person per month left after mortgage costs), and that total housing costs (including utilities and maintenance) would consume less than 30% of total after-transfer household disposable income. Estimates based on the average transaction price for apartments in Riga (EUR 900 per m^2). Annual mortgage costs estimated on the basis of a 30-year repayment mortgage with monthly payments. The interest rate is set at the 2019 average annual percentage rate of charge on loans to households (new business) for house purchase, as published by the Bank of Latvia (2.9%). This rate is assumed to remain fixed throughout the lifetime of the mortgage. Utilities and maintenance charges are assumed to cost EUR 2.5 per m^2 per month. It is assumed that the household already has access to a deposit worth 15% of the transaction price. The presence of a flushing toilet and the presence of leaking roof, damp walls/floors/foundation, or rot in window frame or floor are based on self-reported information by households. Household disposable incomes are OECD estimates based on information from the European Union Statistics on Income and Living Conditions (EU SILC) survey 2018.

Source: OECD estimates based on the European Union Statistics on Income and Living Conditions (EU SILC) survey, Latio Residential Report: 1st Half of 2019 (http://latio.lv/en/services/market-analysis-and-review-1/housing-market), and Bank of Latvia Interest Rate Statistics (https://www.bank.lv/en/statistics/stat-data/interest-rate-statistics).

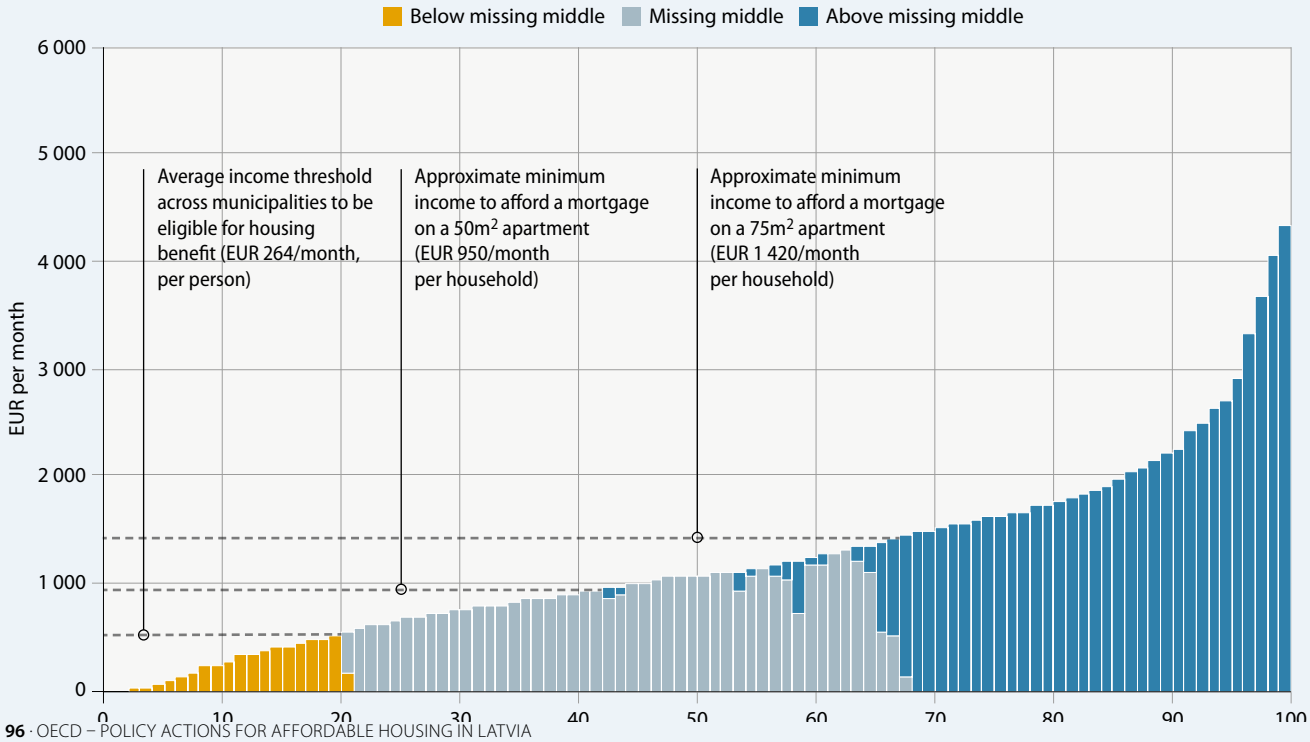
Figure A C.3. Illustration of the missing middle selected household types, after testing for after-mortgage-cost residual disposable income per person

Illustrative example of access to housing instruments and the "missing middle" in Latvia, by before-transfer disposable income percentile and household type, after testing for after-mortgage-cost residual disposable income per person, Latvia, 2018

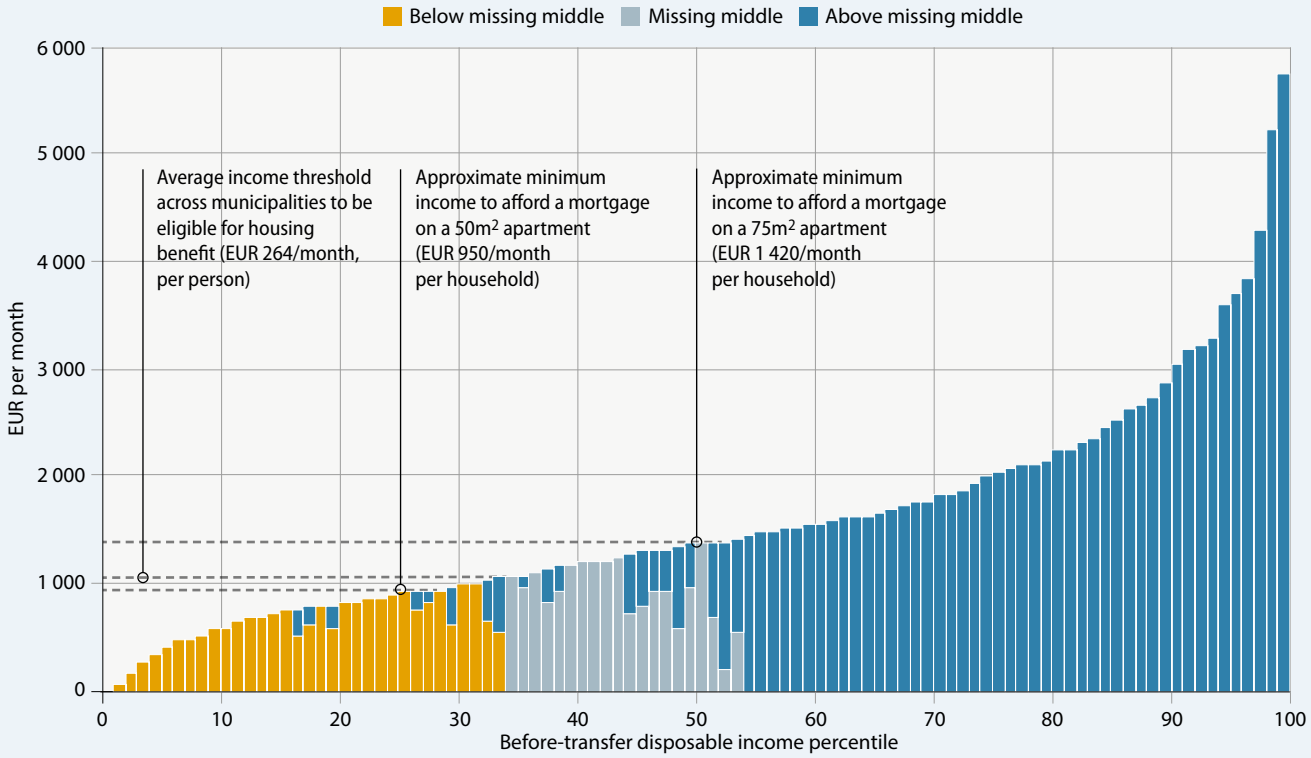
Panel A. Single-person households



Panel B. Two-adult, no-child households (both under 65)



Panel C. Two-adult, two-child households

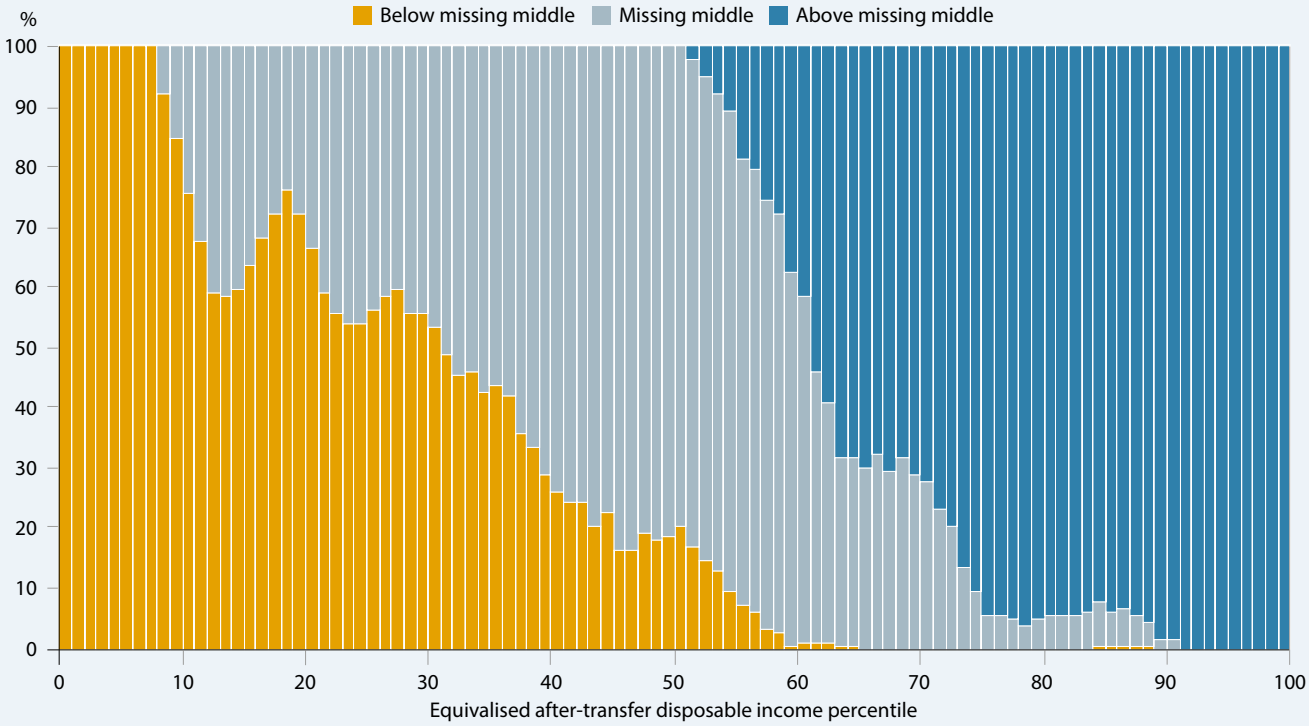


Note: This figure is an alternative version of Figure 3.5. "Eligible for and could afford a mortgage" means that the household would pass a EUR 300 per person residual income test for a commercial mortgage (i.e. the household would have a disposable income of at least EUR 300 per person per month left after mortgage costs), and that total housing costs (including utilities and maintenance) would consume less than 30% of total after-transfer household disposable income. Estimates based on the average transaction price for apartments in Riga (EUR 900 per m^2). The "missing middle" are those who are not eligible for housing benefit and are not eligible for and/or cannot afford a mortgage on a 75m^2 apartment. For more information on the calculation of the affordability thresholds, see Figure 2.6 in Section 2.2.1. Average income threshold across municipalities in order to be eligible for housing support is weighted by population size of the respective municipalities. Across municipalities, this threshold can range between EUR 128 and EUR 430. Note that the figure is illustrative only; in particular, please note that mortgage affordability is determined using after-transfer disposable income, while the figure uses before-transfer disposable income as its scale.

Source: OECD estimates based on the European Union Statistics on Income and Living Conditions (EU SILC) survey, Latio Residential Report: 1st Half of 2019 (http://latio.lv/en/services/market-analysis-and-review-1/housing-market), Bank of Latvia Interest Rate Statistics (www.bank.lv/en/statistics/stat-data/interest-rate-statistics), and information from the Ministry of Economy and Construction.

Figure A C.4. Illustration of the missing middle, after testing for after-mortgage-cost residual disposable income per person

Distribution of population by missing middle status, by equivalised after-transfer disposable income percentile, after testing for after-mortgage-cost residual disposable income per person, five-percentile moving average, 2018



Note: The "missing middle" are defined as those that live in households that are not eligible for housing benefit and are not eligible for and/or cannot afford a mortgage on a 75m^2 apartment. People categorised as "below missing middle" are those in households that are eligible for housing benefit. People categorised as "above missing middle" are those in households that are eligible for and can afford a mortgage on a 75m^2 apartment. Eligibility for housing benefit is set at a maximum before-transfer household income per person of EUR 264 per month - the weighted average income threshold across municipalities. "Eligible for and could afford a mortgage" means that the household would pass a EUR 300 per person residual income test for a commercial mortgage (i.e. the household would have a disposable income of at least EUR 300 per person per month left after mortgage costs), and that total housing costs (including utilities and maintenance) would consume less than 30% of total after-transfer household disposable income. Estimates based on the average transaction price for apartments in Riga (EUR 900 per m^2). For more information on the calculation of the affordability thresholds, see Figure 2.6 in Section 2.2.1. Equivalised after-transfer disposable income is calculated based on information from EU-SILC. Due to limited sample sizes, the estimated share of people below, in, or above the missing middle fluctuates slightly across percentiles.

Source: OECD estimates based on the European Union Statistics on Income and Living Conditions (EU SILC) survey, Latio Residential Report: 1st Half of 2019 (http://latio.lv/en/services/market-analysis-and-review-1/housing-market), Bank of Latvia Interest Rate Statistics (www.bank.lv/en/statistics/stat-data/interest-rate-statistics), and information from the Ministry of Economy and Construction.

Table A C.1. Characteristics of the missing middle, after testing for after-mortgage-cost residual disposable income per person

Distribution of households and the population by missing middle status, by household and population characteristics, after testing for after-mortgage-cost residual disposable income per person , Latvia, 2018 (%)

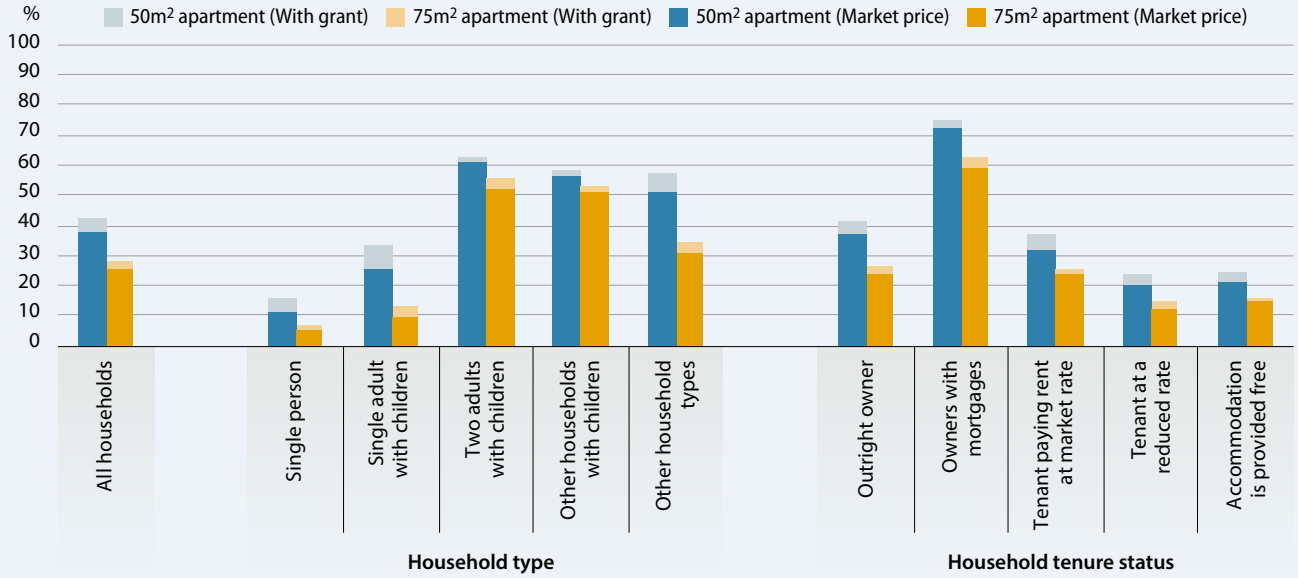
			Below missing middle	Missing middle	Above missing middle
Share of households	**All households**		**29.6**	**43.6**	**26.8**
	By household type	Single person household	33.0	61.6	5.4
		Single parent with dependent children	47.9	42.1	10.0
		Two adults with dependent children	27.5	17.9	54.6
		Other households with dependent children	27.2	5.8	67.1
		Other households	25.1	44.1	30.8
	By tenure	Own outright	29.5	45.6	24.9
		Owner with mortgage	11.9	28.1	60.0
		Rent (private)	31.3	42.6	26.1
		Rent (subsidized)	50.8	35.5	13.6
		Other, unknown	35.5	49.0	15.6
	By equivalised after-transfer income level	First quintile	74.0	26.0	0.0
		Second quintile	33.1	66.8	0.1
		Third quintile	5.5	83.3	11.2
		Fourth quintile	0.3	39.0	60.7
		Fifth quintile	0.1	6.9	93.0
Share of population	**Total population**		**28.7**	**32.8**	**38.5**
	By age group	Below 15	32.2	15.5	52.3
		15-29	26.8	25.1	48.0
		30-64	25.7	32.9	41.5
		65+	34.5	50.7	14.7
	By young specialist status	Not a young specialist	30.2	33.5	36.3
		Young specialist	9.9	23.6	66.5

Note: This table is an alternative version of Table 3.5. The "missing middle" are defined as those that live in households that are not eligible for housing benefit and are not eligible for and/or cannot afford a mortgage on a 75m^2 apartment. People categorised as "below missing middle" are those in households that are eligible for housing benefit. People categorised as "above missing middle" are those in households that are eligible for and can afford a mortgage on a 75m^2 apartment. Eligibility for housing benefit is set at a maximum before-transfer household income per person of EUR 264 per month - the weighted average income threshold across municipalities. "Eligible for and could afford a mortgage" means that the household would pass a EUR 300 per person residual income test for a commercial mortgage (i.e. the household would have a disposable income of at least EUR 300 per person per month left after mortgage costs), and that total housing costs (including utilities and maintenance) would consume less than 30% of total after-transfer household disposable income. Estimates based on the average transaction price for apartments in Riga (EUR 900 per m^2). "Young specialists" are defined as people aged 34 or under with upper-secondary vocational education or tertiary education. For more information on the calculation of the affordability thresholds, see Figure 2.6 in Section 2.2.1.

Source: OECD estimates based on the European Union Statistics on Income and Living Conditions (EU SILC) survey, Latio Residential Report: 1st Half of 2019 (http://latio.lv/en/services/market-analysis-and-review-1/housing-market), Bank of Latvia Interest Rate Statistics (www.bank.lv/en/statistics/stat-data/interest-rate-statistics), and information from the Ministry of Economy and Construction.

Figure A C.5. Illustration on the potential impact of a EUR 10 000 homebuyer's grant on mortgage affordability, after testing for after-mortgage-cost residual disposable income per person

Estimated share of households that would be eligible for and could afford a mortgage on an apartment without spending more than 30% of household disposable income on total housing costs, by apartment size, before and after introduction of a EUR 10,000 home buyer's grant, based on the average transaction price in Riga, Latvia, 2018



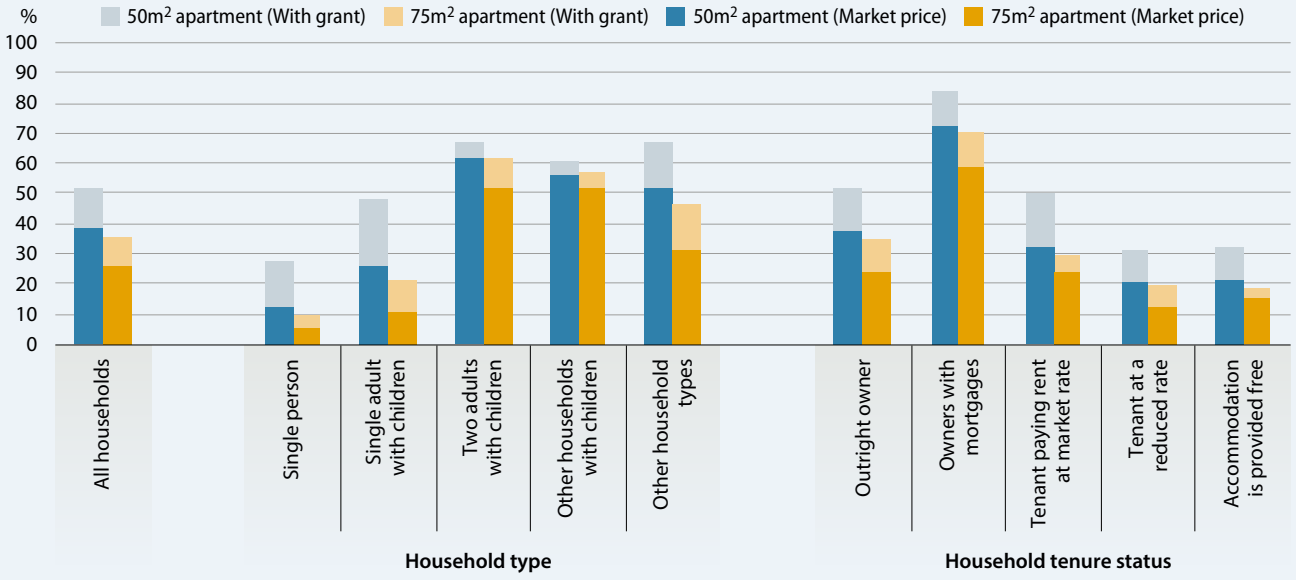
Note: This figure is an alternative version of Figure 4.6. "Eligible for and could afford a mortgage" means that the household would pass a EUR 300 per person residual income test for a commercial mortgage (i.e. the household would have a disposable income of at least EUR 300 per person per month left after mortgage costs), and that total housing costs (including utilities and maintained) would consume less than 30% of total after-transfer household disposable income. Estimates based on the average transaction price for apartments in Riga (EUR 900 per m^2), with the household in receipt of a homebuyer's grant that reduces the transaction price by EUR 10,000. Annual mortgage costs estimated on the basis of a 30-year repayment mortgage with monthly payments. The interest rate is set at the 2019 average annual percentage rate of charge on loans to households (new business) for house purchase, as published by the Bank of Latvia (2.9%). This rate is assumed to remain fixed throughout the lifetime of the mortgage. Utilities and maintained charges are assumed to cost EUR 2.5 per m^2 per month. It is assumed that the household already has access to a deposit worth 15% of the transaction price. For the breakdown by household types, "children" are defined as household members aged 17 or less, or household members aged between 18 and 24 that are economically inactive and living with at least one parent. Household disposable incomes are OECD estimates based on information from the European Union Statistics on Income and Living Conditions (EU SILC) survey 2018.

Source: OECD estimates based on the European Union Statistics on Income and Living Conditions (EU SILC) survey, Latio Residential Report: 1st Half of 2019 (http://latio.lv/en/services/market-analysis-and-review-1/housing-market), and Bank of Latvia Interest Rate Statistics (https://www.bank.lv/en/statistics/stat-data/interest-rate-statistics).

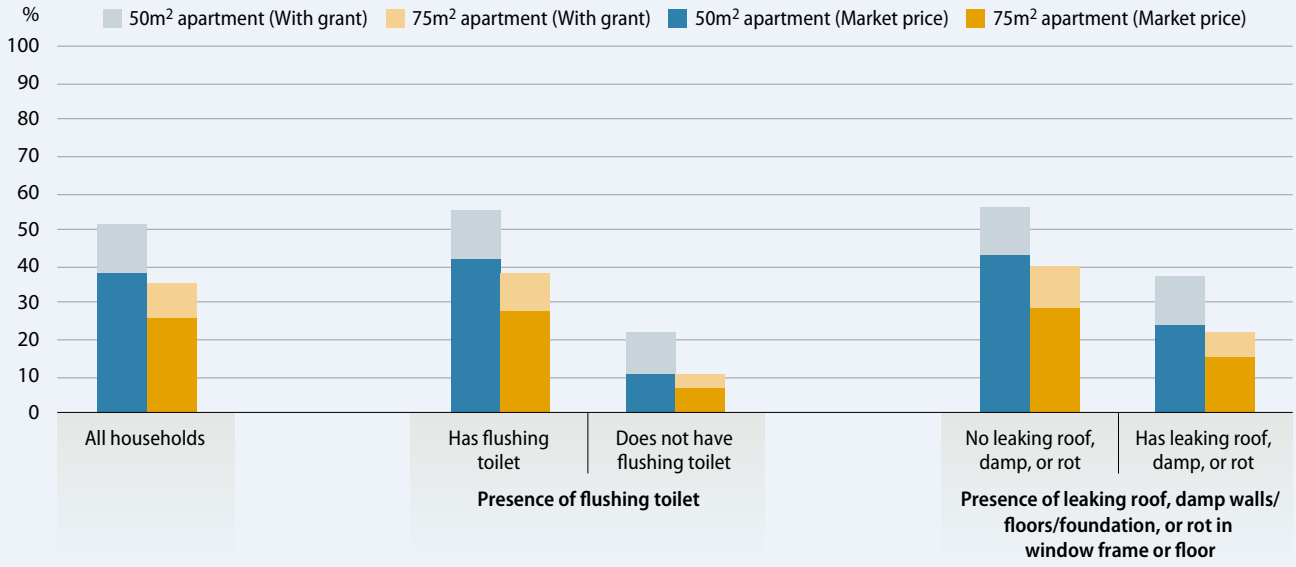
Figure A C.6. Illustration on the potential impact of a EUR 30 000 homebuyer's grant on mortgage affordability, after testing for after-mortgage-cost residual disposable income per person

Estimated share of households that would be eligible for and could afford a mortgage on an apartment without spending more than 30% of household disposable income on total housing costs, by apartment size, before and after introduction of a EUR 30,000 home buyer's grant, based on the average transaction price in Riga, Latvia, 2018

Panel A: By household type



Panel B: By housing quality problems



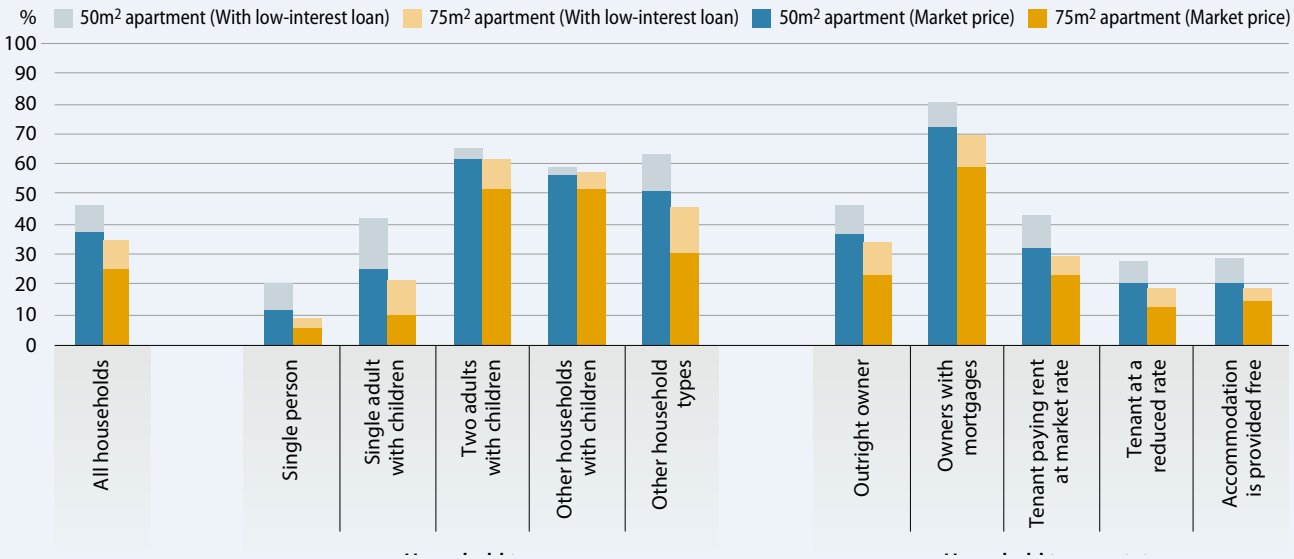
Note: This figure is an alternative version of Figure 4.7. "Eligible for and could afford a mortgage" means that the household would pass a EUR 300 per person residual income test for a commercial mortgage (i.e. the household would have a disposable income of at least EUR 300 per person per month left after mortgage costs), and that total housing costs (including utilities and maintained) would consume less than 30% of total after-transfer household disposable income. Estimates based on the average transaction price for apartments in Riga (EUR 900 per m^2), with the household in receipt of a home buyer's grant that reduces the transaction price by EUR 30,000. Annual mortgage costs estimated on the basis of a 30-year repayment mortgage with monthly payments. The interest rate is set at the 2019 average annual percentage rate of charge on loans to households (new business) for house purchase, as published by the Bank of Latvia (2.9%). This rate is assumed to remain fixed throughout the lifetime of the mortgage. Utilities and maintained charges are assumed to cost EUR 2.5 per m^2 per month. It is assumed that the household already has access to a deposit worth 15% of the transaction price. For the breakdown by household types, "children" are defined as household members aged 17 or less, or household members aged between 18 and 24 that are economically inactive and living with at least one parent. The presence of a flushing toilet and the presence of leaking roof, damp walls/floors/foundation, or rot in window frame or floor are based on self-reported information by households. Household disposable incomes are OECD estimates based on information from the European Union Statistics on Income and Living Conditions (EU SILC) survey 2018.

Source: OECD estimates based on the European Union Statistics on Income and Living Conditions (EU SILC) survey, Latio Residential Report: 1st Half of 2019 (http://latio.lv/en/services/market-analysis-and-review-1/housing-market), and Bank of Latvia Interest Rate Statistics (https://www.bank.lv/en/statistics/stat-data/interest-rate-statistics).

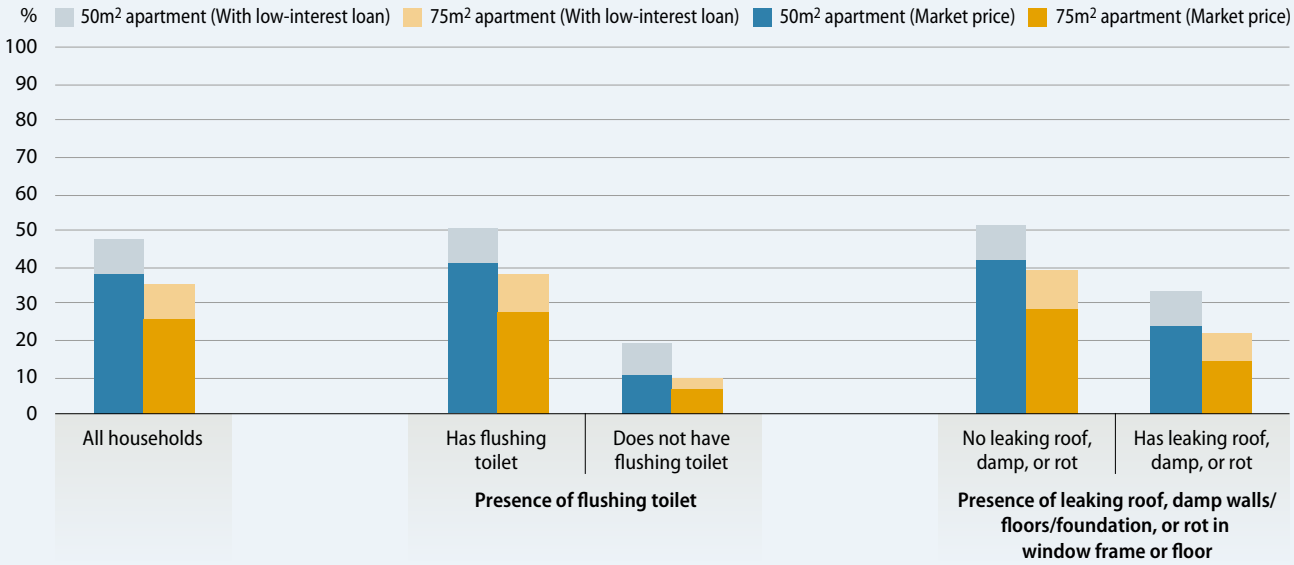
Figure A C.7. Illustration on the potential impact of a government-supported low-interest loan on mortgage affordability, after testing for after-mortgage-cost residual disposable income per person

Estimated share of households that would be eligible for and could afford a mortgage on an apartment without spending more than 30% of household disposable income on total housing costs, by apartment size, before and after introduction of a direct 40-year government loan at an interest rate equivalent to the yield on Latvia's 10-year government bonds, based on the average transaction price in Riga, Latvia, 2018

Panel A: By household type



Panel B: By housing quality problems



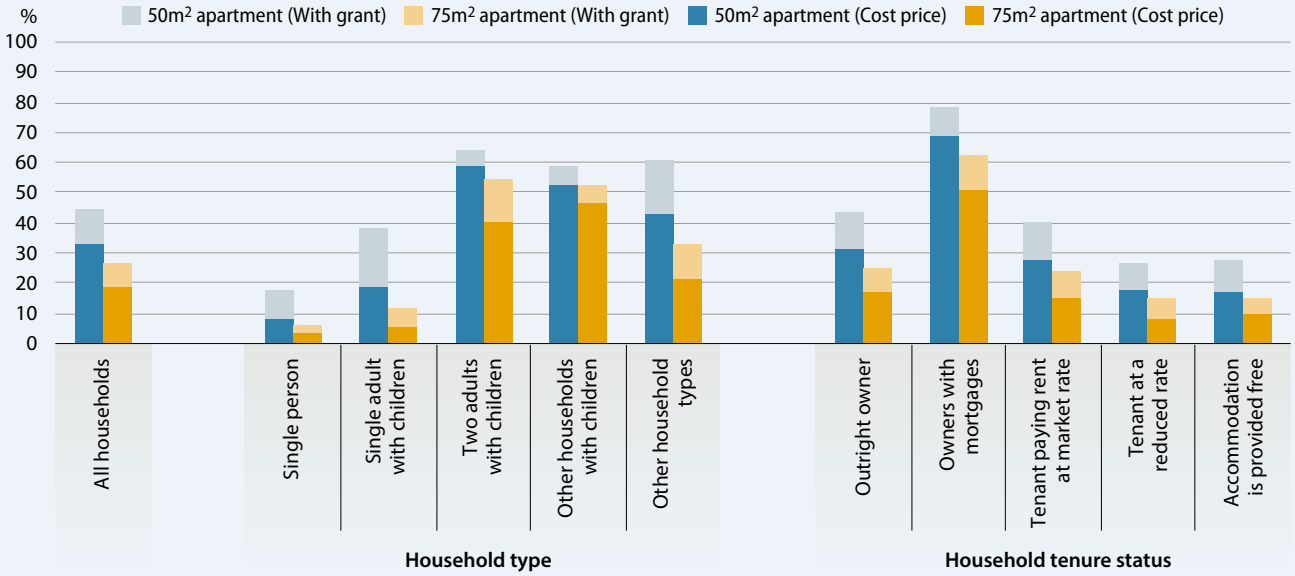
Note: This figure is an alternative version of Figure 4.8. "Eligible for and could afford a mortgage" means that the household would pass a EUR 300 per person residual income test for a commercial mortgage (i.e. the household would have a disposable income of at least EUR 300 per person per month left after mortgage costs), and that total housing costs (including utilities and maintained) would consume less than 30% of total after-transfer household disposable income. Estimates based on the average transaction price for apartments in Riga (EUR 900 per m²). Annual mortgage costs estimated on the basis of a 40-year repayment mortgage with monthly payments. The interest rate is set at the current yield on Latvia's 10-year government bonds (0.55%). This rate is assumed to remain fixed throughout the lifetime of the mortgage. Utilities and maintained charges are assumed to cost EUR 2.5 per m² per month. It is assumed that the household already has access to a deposit worth 15% of the transaction price. For the breakdown by household types, "children" are defined as household members aged 17 or less, or household members aged between 18 and 24 that are economically inactive and living with at least one parent. The presence of a flushing toilet and the presence of leaking roof, damp walls/floors/foundation, or rot in window frame or floor are based on self-reported information by households. Household disposable incomes are OECD estimates based on information from the European Union Statistics on Income and Living Conditions (EU SILC) survey 2018.

Source: OECD estimates based on the European Union Statistics on Income and Living Conditions (EU SILC) survey, Latio Residential Report: 1st Half of 2019 (http://latio.lv/en/services/market-analysis-and-review-1/housing-market), and Bank of Latvia Interest Rate Statistics (https://www.bank.lv/en/statistics/stat-data/interest-rate-statistics).

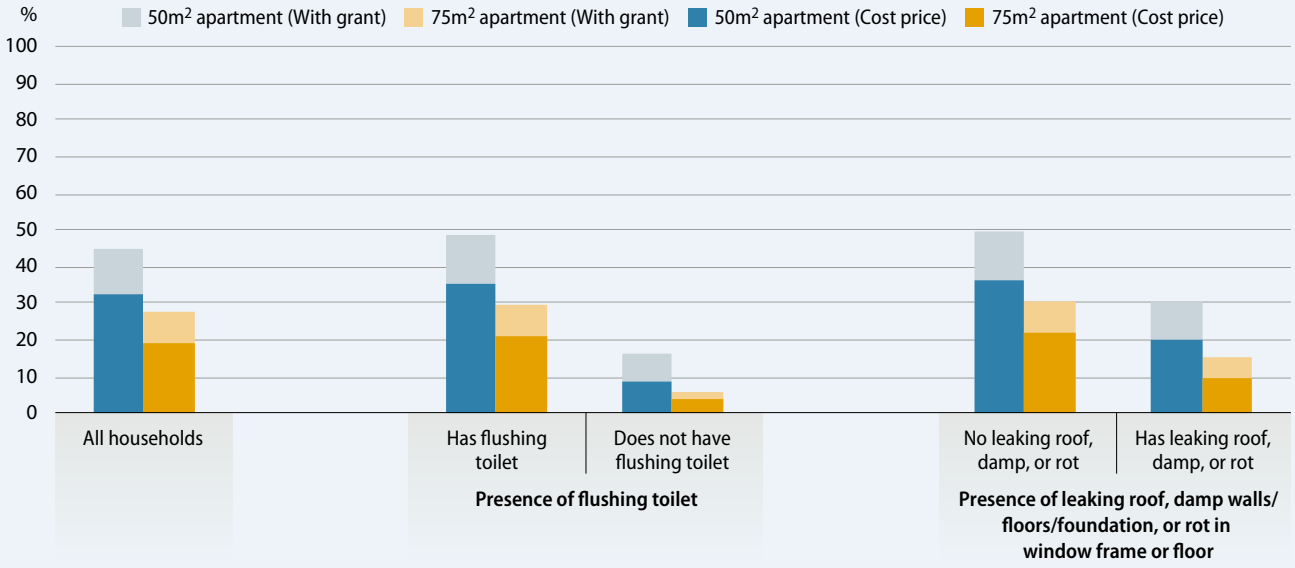
Figure A C.8. Illustration on the potential impact of a EUR 30 000 homebuyer's grant on the affordability of new-build apartments, after testing for after-mortgage-cost residual disposable income per person

Estimated share of households that would be eligible for and could afford a mortgage on a new-build apartment without spending more than 30% of household disposable income on total housing costs, by apartment size, before and after introduction of a EUR 30,000 home buyer's grant, based on new builds built by a non-profit organisation at a cost of EUR 1200 per m^2, Latvia, 2018

Panel A: By household type



Panel B: By housing quality problems



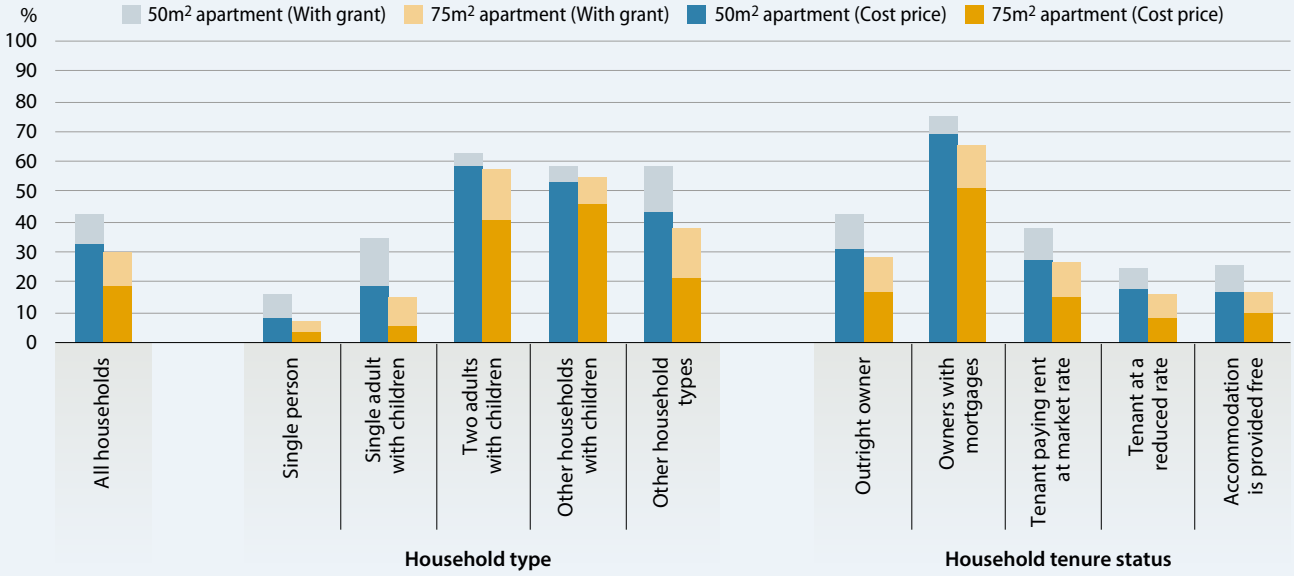
Note: This figure is an alternative version of Figure 4.9. "Eligible for and could afford a mortgage" means that the household would pass a EUR 300 per person residual income test for a commercial mortgage (i.e. the household would have a disposable income of at least EUR 300 per person per month left after mortgage costs), and that total housing costs (including utilities and maintained) would consume less than 30% of total after-transfer household disposable income. Estimates based on the transaction price for a new-build apartment priced at EUR 1200 per m^2, with the household in receipt of a home buyer's grant that reduces the transaction price by EUR 30,000. Annual mortgage costs estimated on the basis of a 30-year repayment mortgage with monthly payments. The interest rate is set at the 2019 average annual percentage rate of charge on loans to households (new business) for house purchase, as published by the Bank of Latvia (2.9%). This rate is assumed to remain fixed throughout the lifetime of the mortgage. Utilities and maintained charges are assumed to cost EUR 2.5 per m^2 per month. It is assumed that the household already has access to a deposit worth 15% of the transaction price. For the breakdown by household types, "children" are defined as household members aged 17 or less, or household members aged between 18 and 24 that are economically inactive and living with at least one parent. The presence of a flushing toilet and the presence of leaking roof, damp walls/floors/foundation, or rot in window frame or floor are based on self-reported information by households. Household disposable incomes are OECD estimates based on information from the European Union Statistics on Income and Living Conditions (EU SILC) survey 2018.

Source: OECD estimates based on the European Union Statistics on Income and Living Conditions (EU SILC) survey, and Bank of Latvia Interest Rate Statistics (https://www.bank.lv/en/statistics/stat-data/interest-rate-statistics).

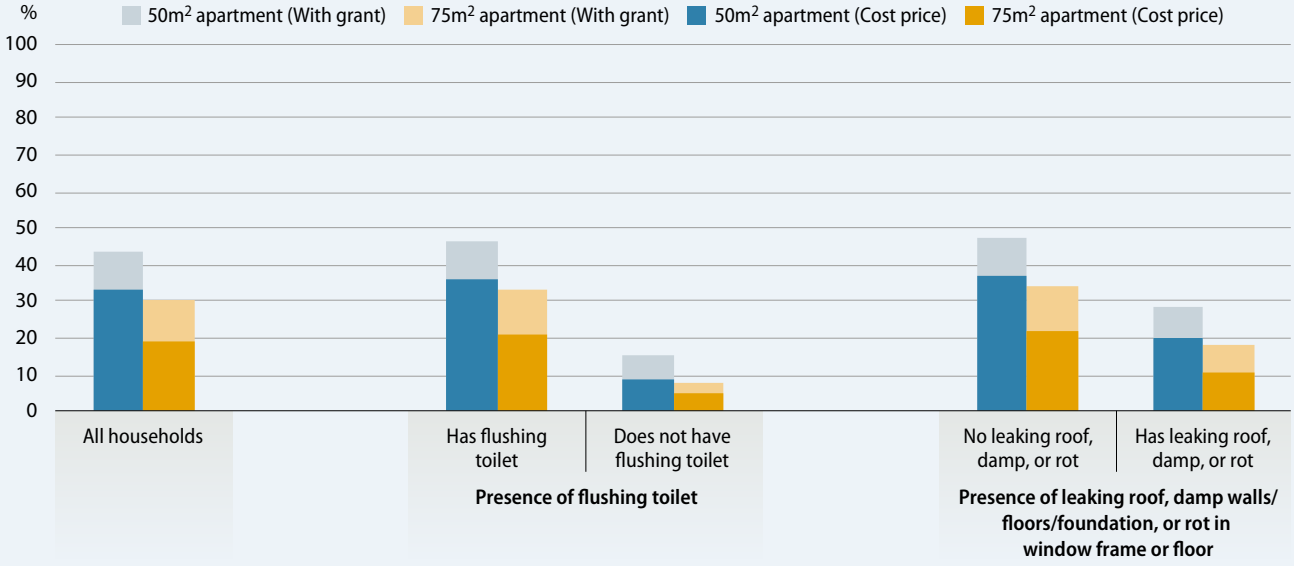
Figure A C.9. Illustration on the potential impact of a government-supported low-interest loan on the affordability of new-build apartments, after testing for after-mortgage-cost residual disposable income per person

Estimated share of households that would be eligible for and could afford a mortgage on a new-build apartment without spending more than 30% of household disposable income on total housing costs, by apartment size, before and after introduction of a direct 40-year government loan at an interest rate equivalent to the yield on Latvia's 10-year government bonds, based on new builds built by a non-profit organisation at a cost of EUR 1200 per m², Latvia, 2018

Panel A: By household type



Panel B: By housing quality problems



Note: This figure is an alternative version of Figure 4.10. "Eligible for and could afford a mortgage" means that the household would pass a EUR 300 per person residual income test for a commercial mortgage (i.e. the household would have a disposable income of at least EUR 300 per person per month left after mortgage costs), and that total housing costs (including utilities and maintained) would consume less than 30% of total after-transfer household disposable income. Estimates based on the transaction price for a new-build apartment priced at EUR 1200 per m². Annual mortgage costs estimated on the basis of a 40-year repayment mortgage with monthly payments. The interest rate is set at the current yield on Latvia's 10-year government bonds (0.55%). This rate is assumed to remain fixed throughout the lifetime of the mortgage. Utilities and maintained charges are assumed to cost EUR 2.5 per m² per month. It is assumed that the household already has access to a deposit worth 15% of the transaction price. For the breakdown by household types, "children" are defined as household members aged 17 or less, or household members aged between 18 and 24 that are economically inactive and living with at least one parent. The presence of a flushing toilet and the presence of leaking roof, damp walls/floors/foundation, or rot in window frame or floor are based on self-reported information by households. Household disposable incomes are OECD estimates based on information from the European Union Statistics on Income and Living Conditions (EU SILC) survey 2018.

Source: OECD estimates based on the European Union Statistics on Income and Living Conditions (EU SILC) survey, Latio Residential Report: 1st Half of 2019 (http://latio.lv/en/services/market-analysis-and-review-1/housing-market), and Bank of Latvia Interest Rate Statistics (https://www.bank.lv/en/statistics/stat-data/interest-rate-statistics).

Annex D. EUROMOD I2.0+ simulations: Additional details and assumptions

Background

Purpose: The aim of the analysis is to design and evaluate a reform of housing benefit in Latvia. The purpose of the reform is to increase benefit generosity by raising benefit amounts and/or eligibility thresholds and to provide access to the benefit for a larger proportion of the population at the lower part of the income distribution (in particular, families with children, single parents, and working-age adults in unstable employment).

Tools: EUROMOD I2.0+ (released in February 2020); covers tax-benefit policies up to 2019.

Data: EUROMOD data for Latvia based on EU-SILC 2017 with 2016 incomes (released in February 2020). EU-SILC 2019 (with 2018 incomes) was released in November 2019. However, this data has not been adjusted for EUROMOD yet.

Baseline: The baseline refers to 2019 policy rules (as of June 30). Market incomes and non-simulated income components in EUROMOD input data are uprated to 2019 levels using relevant indicators (e.g. average wage growth, CPI, etc.). Labour market characteristics are not adjusted. For more details see (Pluta and Zasova, 2019[99]).

Model assumptions:

- All benefits and taxes are simulated assuming full take-up and no tax evasion.
- The means test for GMI and housing benefit in Latvia is based on the income received during the last three months before the application. In the model, the means test is simulated based on annual income (monthly incomes are not available in EU-SILC data).
- Municipalities set the GMI levels within the maximum and the minimum defined by the national legislation. In the model, two GMI regimes are modelled: Riga and the minimum standard GMI scheme (in the model it is applied in all territories outside Riga).
- Municipalities determine eligibility rules, amounts, and duration of housing benefit. In the model, Riga rules are applied to the whole territory of Latvia (Riga rules are more generous than the average).
- The housing benefit does not cover all housing expenditure, but only the expenditure that is considered "standard" by the regulations of municipality. Usually, these norms are defined in terms of consumption of certain utilities (e.g. water, gas, electricity, etc.) per square meter. The maximum "standard" area of accommodation depends on the number of household members. These complex rules cannot be modelled using the EU-SILC data. In the model, the proxy maximum limits on housing costs are defined based on average housing costs per household member by household size in rural and urban areas (estimated using Household Budget Survey 2016 and uprated to 2019 using CPI for housing and utilities).
- Seasonality of housing expenditure (i.e. higher utility bills in winter and lower in summer) cannot be modelled as EU-SILC microdata doesn't record housing costs on monthly basis. Therefore, the simulations will not capture some recipients who qualify for housing benefit only in winter months, but not in summer month.
- EUROMOD is a static model; behavioural responses are not modelled.

Interactions

- Housing benefit is the last resort benefit, it is calculated after all other benefits (including GMI) and taxes. Increase in housing benefit does not affect other benefits and taxes. The payment of irregular and small municipality benefits (which might be reduced in case of a higher housing benefit) are not simulated in the model.
- Eligibility for housing benefit is defined in two stages. First, a family applies for the status of a "low-income family" (*maznodrošināta ģimene*), then the benefits amount is calculated based on family income and actual housing expenditure (up to the maximum standard housing expenditure).
- In Riga, the income eligibility thresholds for "low-income families" are relatively high: EUR 400 per month for a single pensioner living alone; EUR 320 per

month per person for other household types. These thresholds are generally not binding, so they remain constant in the analysis.

Reform scenarios

- ***Reform scenario 1***: increase maximum standard housing expenditure covered by the benefit by 50%. In the model, this implies increasing proxy maximum limits on housing costs. In reality, this means that municipalities define more generous norms of housing consumption per person.

- ***Reform scenario 2***: increase maximum standard housing expenditure covered by the benefit by 100%.

- ***Reform scenario 3***: the first EUR 160 of earned income per family per month is not included when the benefit amount is computed (this is half of the current eligibility threshold for a working-age low-income family in Riga, which is slightly less than half of the net minimum wage for a single working-age adult). The means test for low-income family status and maximum standard housing expenditure remain unchanged.

- ***Reform scenario 4***: the first EUR 320 of earned income per family per month is not included when the benefit amount is computed (this is the current eligibility threshold for a working-age low-income family in Riga, which is slightly less than the net minimum wage for a single working-age adult). The means test for low-income family status and maximum standard housing expenditure remain unchanged.

Summary tables

Table 4.3. Impacts of different housing benefit reform scenarios

% change that could be generated under each reform scenario, compared to the current housing benefit scheme (baseline)

	Reform 1: Increase in standard housing expenditure by 50%	**Reform 2:** Increase in standard housing expenditure by 100%	**Reform 3:** Earnings disregard of EUR 160 per HH per month	**Reform 4:** Earnings disregard of EUR 320 per HH per month
Expenditure on housing benefit (% change)	24.1	36.8	126.0	336.8
Number of households recipients (% change)	5.9	10.0	83.4	192.9
Number of individuals in recipient households (% change)	6.3	10.5	104.5	262.7
Average benefit amount per household (% change)	17.2	24.4	23.2	49.1

Note: The simulated scenarios are assessed based on microdata from EU-SILC. The baseline simulates the tax-benefit system as of 30 June 2019, including the current housing benefit scheme. The simulated reforms modify the rules of housing benefit scheme, but keep other characteristics, such as market incomes and labour market decisions, unchanged.

Source: OECD calculations based on EUROMOD I2.0+.

Table 4.4. Percentage increase of housing benefit recipients, by household type

% change that could be generated under each reform scenario, compared to the current housing benefit scheme (baseline)

	Reform 1: Increase in standard housing expenditure by 50%	**Reform 2:** Increase in standard housing expenditure by 100%	**Reform 3:** Earnings disregard of EUR 160 per HH per month	**Reform 4:** Earnings disregard of EUR 320 per HH per month
Single parents (% change)	6	15	77	228
Dependent children (% change)	7	13	100	310
Working age adults with positive earnings (% change)	4	11	275	657
Pension-age adults (seniors) (% change)	21	31	50	66

Note: Dependent children are less than 15 years old or less than 19 years old if in education. Single parents are not married and live with their dependent children without a partner. Working age adults are between 18 and 64 years old including. Pension age adults are above 64 years old. Categories are not mutually exclusive.

Source: OECD calculations based on EUROMOD I2.0+.

Table 4.5. Share of individuals receiving housing benefit, by income decile (%)

Income deciles	**Baseline:** Current housing benefit scheme	**Reform 1:** Increase in standard housing expenditure by 50%	**Reform 2:** Increase in standard housing expenditure by 100%	**Reform 3:** Earnings disregard of EUR 160 per HH per month	**Reform 4:** Earnings disregard of EUR 320 per HH per month
1 (bottom)	14.03	14.45	14.82	27.02	35.26
2	0.80	1.24	1.52	3.91	18.13
3	0.42	0.54	0.54	0.54	2.27
4	0.26	0.26	0.26	0.26	0.26
5	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00
10 (top)	0.00	0.00	0.00	0.00	0.00

Note: Income deciles split the population into ten equal parts sorted according to equivalised household disposable income. Household disposable income is equivalised using square root of household size. Income deciles are estimated in the baseline and kept fixed in other reform scenarios.

Source: OECD calculations based on EUROMOD I2.0+.

References

ABS (2019), *Survey of Income and Housing, Australia, 2017-18*, https://www.abs.gov.au/ausstats/abs@.nsf/mf/6553.0 (accessed on 17 January 2020). [22]

Adalet McGowan, M. and D. Andrews (2015), "Labour Market Mismatch and Labour Productivity: Evidence from PIAAC Data", *OECD Economics Department Working Papers*, No. 1209, OECD Publishing, Paris, https://dx.doi.org/10.1787/5js1pzx1r2kb-en. [41]

Aksoy, C. (2016), "Short-term effects of house prices on birth rates.", *EBRD Working Paper No. 192*, https://www.ebrd.com/publications/working-papers/short-term-effects.html. [77]

Andrews, D., A. Caldera Sanchez and A. Johansson (2011), "Housing Markets and Structural Policies in OECD Countries". [28]

Andrews, D., A. Caldera Sánchez and Å. Johansson (2011), "Housing Markets and Structural Policies in OECD Countries", *OECD Economics Department Working Papers*, No. 836, OECD Publishing, Paris, https://dx.doi.org/10.1787/5kgk8t2k9vf3-en. [27]

Atalay, K., A. Li and S. Whelan (2017), *Housing Wealth and Fertility: Australian Evidence*. [74]

Balestra, C. and R. Tonkin (2018), "Inequalities in household wealth across OECD countries: Evidence from the OECD Wealth Distribution Database", *OECD Statistics Working Papers*, No. 2018/01, OECD Publishing, Paris, https://dx.doi.org/10.1787/7e1bf673-en. [24]

BIT (2018), "Testing behaviourally-informed messaging to increase rates of contact between mortgage lenders and customers facing arrears. A report by the Behavioural Insights Team for the Department for Communities, Northern Ireland.". [53]

Blanchard, O. et al. (1992), "Regional Evolutions", *Brookings Papers on Economic Activity*, Vol. 1992/1, p. 1, http://dx.doi.org/10.2307/2534556. [31]

Blanchflower, D. and A. Oswald (2013), *Does High Home-Ownership Impair the Labor Market?*, National Bureau of Economic Research, Cambridge, MA, http://dx.doi.org/10.3386/w19079. [34]

Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit (2015), *Bericht der Baukostensenkungskommission im Rahmen des Bündnisses für bezahlbares Wohnen und Bauen Endbericht*, https://www.bmi.bund.de/SharedDocs/downloads/DE/publikationen/themen/bauen/wohnen/buendnis-bezahlbares-wohnen-baukostensenkungskommission.pdf;jsessionid=66E095191F3954D8D2AE3B8E8274682F.2_cid373?__blob=publicationFile&v=3 (accessed on 2 March 2020). [87]

Causa, O. and Pichelmann (forthcoming 2020), "Should I stay or should I go? Housing and residential mobility across OECD countries"", *OECD Economics Department Working Paper*. [29]

Causa, O. and N. Woloszko (2019), "Housing, wealth accumulation and wealth distribution: evidence and stylized facts", Economics Department - Economic Policy Committee, Working Party No. 1 on Macroeconomic and Structural Policy Analysis, http://dx.doi.org/ECO/CPE/WP1(2019)1. [25]

Central Statistical Bureau (2019), *Comparison between household lowest net income necessary to make ends meet and household disposable income (euro, %) - database [MNG160]*, https://data1.csb.gov.lv/pxweb/en/sociala/sociala__nabadz_nevienl__matnenodr/MNG160.px (accessed on 20 October 2019). [104]

Central Statistical Bureau of Latvia (2016), *Results of the Population Population and Housing Census 2011 in Latvia*, https://www.csb.gov.lv/sites/default/files/publication/2017-08/Nr%2012%20Latvijas%202011.gada%20Tautas%20skaitisanas%20rezultati_Results%20of%20the%202011%20Population%20and%20housing%20census%20in%20Latvia%20%2815_00%29_LV_EN.pdf. [3]

Central Statistics Bureau (2019), *IBG010. Long-term migration. PxWeb*, http://data1.csb.gov.lv/pxweb/en/iedz/iedz__migr/IBG010.px/ (accessed on 23 January 2020). [6]

Chan, S. (2001), "Spatial Lock-in: Do Falling House Prices Constrain Residential Mobility?", *Journal of Urban Economics*, Vol. 49/3, pp. 567-586, http://dx.doi.org/10.1006/JUEC.2000.2205. [39]

Clark, J. and A. Ferrer (2019), "The effect of house prices on fertility: evidence from Canada", *Economics: The Open-Access, Open-Assessment E-Journal*, Vol. 13/2019-38, pp. 1-32, http://dx.doi.org/10.5018/economics-ejournal.ja.2019-38. [73]

Clark, W. (2012), "Do women delay family formation in expensive housing", *Demographic research*, Vol. 27/1, http://dx.doi.org/10.4054/DemRes.2012.27.1. [80]

Coulson, N. and L. Fisher (2009), "Housing tenure and labor market impacts: The search goes on", *Journal of Urban Economics*, Vol. 65/3, pp. 252-264, http://dx.doi.org/10.1016/j.jue.2008.12.003. [36]

Cournède, B., S. Sakha and V. Ziemann (2019), "Empirical links between housing markets and economic resilience", *OECD Economics Department Working Papers*, No. 1562, OECD Publishing, Paris, https://dx.doi.org/10.1787/aa029083-en. [26]

CSB (2019), *Housing maintenance expenditure influence on household financial situation (%).[database MTG060]*, https://data1.csb.gov.lv/pxweb/en/sociala/sociala__majapst/MTG060.px/table/tableViewLayout1/ (accessed on 17 October 2019). [18]

CSB (2019), *MBG070. Composition and structure of consumption expenditure by region average per household member per month (euro; %)*, https://data1.csb.gov.lv/pxweb/en/sociala/sociala__mb__izdevumi/MBG070.px (accessed on 18 October 2019). [107]

de Boer, R. and R. Bitetti (2014), "A Revival of the Private Rental Sector of the Housing Market?: Lessons from Germany, Finland, the Czech Republic and the Netherlands", *OECD Economics Department Working Papers*, No. 1170, OECD Publishing, Paris, https://dx.doi.org/10.1787/5jxv9f32j0zp-en. [63]

Decressin, J. and A. Fatás (1995), "Regional labor market dynamics in Europe", *European Economic Review*, Vol. 39/9, pp. 1627-1655, http://dx.doi.org/10.1016/0014-2921(94)00102-2. [32]

DellaValle N., B. (2018), "In search of behavioural and social levers for effective social housing retrofit programs", *Energy and Buildings,* Volume 172, https://doi.org/10.1016/j.enbuild.2018.05.002. [56]

Denmarks Nationalbank (2018), *New financing of social housing strengthens the market for Danish government securities*, http://www.nationalbanken.dk/en/publications/Documents/2018/12/ANALYSIS_no%2024_New%20financing%20of%20social%20housing%20strengthens%20the%20market%20for%20Danish%20government%20securities.pdf. [58]

Dettling, L. and M. Kearney (2014), "House prices and birth rates: The impact of the real estate market on the decision to have a baby", *Journal of Public Economics*, Vol. 110, pp. 82-100. [75]

DWP (2019), *Households below average income: 1994/95 to 2017/18*, https://www.gov.uk/government/statistics/households-below-average-income-199495-to-201718 (accessed on 17 January 2020). [97]

European Commission (2019), *Country Report Latvia 2019*, European Commission, Brussels, https://ec.europa.eu/info/sites/info/files/file_import/2019-european-semester-country-report-latvia_en.pdf (accessed on 30 August 2019). [47]

European Commission (2019), *Country Report Latvia 2019. 2019 European Semester: Assessment of progress on structural reforms, prevention and correction of macroeconomic imbalances, and results of in-depth reviews under Regulation (EU) No 1176/2011*. [1]

European Commission (2019), *European Construction Sector Observatory: Integrating Digital Innovations in the Construction Sector*, https://ec.europa.eu/docsroom/documents/34517. [89]

European Commission (2018), *European Construction Sector Observatory, Country profile Latvia. June 2018.*. [54]

European Commission (2018), *European Construction Sector Observatory. Country profile Latvia*, European Commission, https://ec.europa.eu/growth/sectors/construction/observatory_en. [88]

European Parliament (2013), *Social Housing in the EU*, http://www.europarl.europa.eu/RegData/etudes/note/join/2013/492469/IPOL-EMPL_NT(2013)492469_EN.pdf. [45]

Eurostat (2020), *Arrears on mortgage or rent payments*, https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_mdes06&lang=en (accessed on 17 January 2020). [10]

Eurostat (2020), *Arrears on utility bills*, https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_mdes07&lang=en (accessed on 17 January 2020). [11]

Eurostat (2020), *Financial burden of the total housing cost*, http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_mded04&lang=en (accessed on 16 January 2020). [12]

Eurostat (2020), *Inability to keep home adequately warm*, http://appsso.eurostat.ec.europa.eu/nui/show.do?lang=en&dataset=ilc_mdes01 (accessed on 22 January 2020). [20]

Eurostat (2020), *Total population considering their dwelling as too dark*, https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_mdho04&lang=en (accessed on 22 January 2020). [19]

Eurostat (2019), *Distribution of population by tenure status, type of household and income group - EU-SILC survey*, https://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do (accessed on 17 October 2019). [102]

Eurostat (2019), *Severe housing deprivation rate by age, sex and poverty status - EU-SILC survey*, https://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do (accessed on 17 October 2019). [103]

Eurostat (2019), *Share of population having moved to other dwelling within the last five year period by tenure status and degree of urbanisation [ilc_hcmp05]*, http://appsso.eurostat.ec.europa.eu/nui/show.do (accessed on 5 November 2019). [105]

Eurostat (2018), *Statistics Explained: Overcrowding rate*, https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Overcrowding_rate (accessed on 21 June 2019). [98]

Eurostat (2016), *EU statistics on income and living conditions (EU-SILC) methodology - housing deprivation - Statistics Explained*, https://ec.europa.eu/eurostat/statistics-explained/index.php/EU_statistics_on_income_and_living_conditions_(EU-SILC)_methodology_-_housing_deprivation (accessed on 9 January 2020). [106]

Fergus, C. and L. Dettling (2020), "Monetary Policy and Birth Rates: The", *Finance and Economics Discussion Series 2020-002. Washington: Board of Governors of the Federal Reserve System*, https://doi.org/10.17016/FEDS.2020.002. [83]

Gabriel, M. et al. (2005), "Conceptualising and measuring the housing affordability problem: National Research Venture 3: Housing Affordability for Lower Income Australians Research Paper 1". [13]

Gibb, K. and J. Hayton (2017), *Overcoming Obstacles to the Funding and Delivery of Affordable Housing Supply in European States 1*. [59]

Glocker, D. and M. Plouin (2016), "Overview of housing policy interventions in Poland", *OECD Regional Development Working Papers 2016/7*, https://www.oecd-ilibrary.org/docserver/5jlpl4n838f2-en. [90]

Hall, C. (2014), "Assumptions About Behavior andChoice in Response to Public Assistance: A Behavioral Decision Analysis."Policy Insights from theBehavioral and Brain Sciences1 (1): 137–43.". [51]

Head, A. and H. Lloyd-Ellis (2012), "Housing Liquidity, Mobility, and the Labour Market", *The Review of Economic Studies*, Vol. 79/4, pp. 1559-1589, http://dx.doi.org/10.1093/restud/rds004. [37]

Hegedus, J., I. Tosics and S. Mayo (1996), "Transition of the housing sector in the east Central European countries", *Review of Urban and Regional Development Studies*, Vol. 8/2, pp. 101-136, http://dx.doi.org/10.1111/j.1467-940X.1996.tb00113.x. [2]

Herbert, C., A. Hermann and D. Mccue (2018), *Measuring Housing Affordability: Assessing the 30-Percent of Income Standard*, Joint Center for Housing Studies of Harvard University, https://www.housingwire.com/articles/29757-huds-donovan-this-is-the-worst-rental-crisis-in-this- (accessed on 5 March 2020). [92]

Ihlanfeldt, K. (2007), "The effect of land use regulation on housing and land prices", *Journal of Urban Economics*, Vol. 61/3, pp. 420-435, https://doi.org/10.1016/j.jue.2006.09.003. [79]

Insee (2020), *Enquête Logement*, https://www.insee.fr/fr/metadonnees/source/serie/s1004 (accessed on 17 January 2020). [23]

Janiak, A. and E. Wasmer (2008), "Mobility in Europe: Why It Is Low, the Bottlenecks, and the Policy Solutions.", *European Economy Economic Papers*, No. 349, European Commission, http://dx.doi.org/10.2765/95760. [30]

Karahan, F. and S. Rhee (2019), "Geographic reallocation and unemployment during the Great Recession: The role of the housing bust", *Journal of Economic Dynamics and Control*, Vol. 100, pp. 47-69, http://dx.doi.org/10.1016/J.JEDC.2018.12.007. [40]

Kim, J. and C. Sparks (2019), "The influence of housing on family size in South Korea: Unstable housing and parity specific risk.", *Working Paper*, http://dx.doi.org/10.31235/osf.io/89gcu. [69]

Kulu, H. and F. Steele (2016), "Interrelationships between childbearing and housing transitions in the family life course", *Demography*, Vol. 50/5, pp. 1687-1714, https://doi.org/10.1007/s13524-013-0216-2. [66]

Kulu, H. and A. Vikat (2007), "Fertility differences by housing type: The effect of housing conditions or of selective moves?", *Demographic research*, Vol. 17, pp. 775-802, https://dx.doi.org/10.4054/DemRes.2007.17.26. [67]

Kutty, N. (2005), "A new measure of housing affordability: Estimates and analytical results", *Housing Policy Debate*, Vol. 16/1, pp. 113-142, http://dx.doi.org/10.1080/10511482.2005.9521536. [94]

Latio (2019), *Housing Market Report - 1st half of 2019*. [17]

Latio (2019), *Housing Market Report 2018*. [15]

Latvijas Banka (2019), *Financial Stability Report 2019*, https://datnes.latvijasbanka.lv/fsp/FSP_2019_en.pdf (accessed on 5 February 2020). [50]

Latvijas Banka (2019), *Macroeconomic Developments Report June 2019*, https://datnes.latvijasbanka.lv/mnp/MNP_June_2019_EN.pdf (accessed on 2 October 2019). [5]

Lawson, J. et al. (2014), "Enhancing affordable rental housing investment via an intermediary and guarantee", *AHURI Research and Policy Bulletin* 174. [49]

Liu, M. and J. Clark (2017), "The effect of the price or rental cost of housing on family size: a theoretical analysis with reference to New Zealand.", *New Zealand Economic Papers*, Vol. 51/3, pp. 281-301, https://doi.org/10.1080/00779954.2016.1199591. [71]

Lovenheim, M. and K. Mumford (2013), "Do family wealth shocks affect fertility choices Evidence from the housing market", *Review of Economics and Statistics*, Vol. 95/2, pp. 464-475. [72]

Luci-Greulich, A. et al. (2013), "The Impact of Family Policies on Fertility Trends in Developed Countries", *Eur J Population*, Vol. 29, pp. 387-416, http://dx.doi.org/10.1007/s10680-013-9295-4. [109]

McCartney, G. et al. (2017), *Regeneration and health: a structured, rapid literature review*, Elsevier B.V., http://dx.doi.org/10.1016/j.puhe.2017.02.022. [43]

Mizutani, N. (2015), "The effects of housing wealth on fertility decisions: Evidence", *Economics Bulletin*, Vol. 35/4, pp. :2710–2724, http://www.accessecon.com/Pubs/EB/2015/Volume35/EB-15-V35-I4-P271.pdf. [76]

Mulder, C. and F. Billari (2010), "Homeownership regimes and low fertility", *Housing Studies*, Vol. 25/4, pp. 527-541, https://doi.org/10.1080/02673031003711469. [81]

Munch, J., M. Rosholm and M. Svarer (2006), "Are Homeowners Really More Unemployed?", *The Economic Journal*, Vol. 116/514, pp. 991-1013, http://dx.doi.org/10.1111/j.1468-0297.2006.01120.x. [38]

Ober Haus - Realia Group (2019), *Real Estate Market Report: Baltic States Capitals*, https://issuu.com/ober-haus/docs/ober-haus-market-report-baltic-stat_23baac66f38744. [85]

OECD (2020), *Housing prices (indicator)*, http://dx.doi.org/10.1787/63008438-en. [70]

OECD (2019), *Affordable Housing Database*, http://www.oecd.org/social/affordable-housing-database.htm (accessed on 4 December 2018). [7]

OECD (2019), *Economic Outlook No 106 - November 2019. - OECD Statistics*, https://stats.oecd.org/index.aspx?DataSetCode=EO. [111]

OECD (2019), *OECD Child Well-Being Data Portal*, http://www.oecd.org/els/family/child-well-being/data/ (accessed on 17 January 2020). [65]

OECD (2019), *OECD Economic Surveys: Latvia*. [110]

OECD (2019), *OECD Economic Surveys: Latvia 2019*, OECD Publishing, Paris, https://dx.doi.org/10.1787/f8c2f493-en. [4]

OECD (2019), *OECD Family Database*, http://www.oecd.org/els/family/database.htm (accessed on 20 April 2018). [64]

OECD (2018), *THE OECD TAX-BENEFIT MODEL FOR LATVIA Description of policy rules for 2018*, http://www.oecd.org/els/benefits-and-wages.htm (accessed on 20 February 2020). [46]

OECD (2017), *How's Life? 2017: Measuring Well-being*, OECD Publishing, Paris, https://dx.doi.org/10.1787/how_life-2017-en. [101]

OECD (2017), *OECD Affordable Housing Database -*, http://www.oecd.org/els/family/affordable-housing-database.htm (accessed on 11 December 2017). [108]

OECD (2017), *OECD Economic Surveys: Latvia 2017*. [44]

OECD (2016), *Making Cities Work for All: Data and Actions for Inclusive Growth*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264263260-en. [100]

OECD (2016), *OECD Reviews of Labour Market and Social Policies: Latvia 2016*, OECD Reviews of Labour Market and Social Policies, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264250505-en. [48]

OECD (2015), *OECD Urban Policy Reviews: Mexico 2015: Transforming Urban Policy and Housing Finance*, OECD Urban Policy Reviews, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264227293-en. [91]

OECD (forthcoming, 2020), *Housing and Inclusive Growth*. [42]

Oswald, A. (1996), *A Conjecture on the Explanation for High Unemployment in the Industrialized Nations: Part I*, https://ageconsearch.umn.edu/record/268744/ (accessed on 9 August 2019). [35]

Pluta, A. and A. Zasova (2019), *EUROMOD COUNTRY REPORT LATVIA (LV) 2016-2019*, https://www.euromod.ac.uk (accessed on 17 March 2020). [99]

Rayman, M. (2006), "The psychology of residential developers: lessons from behavioral economics and additional explanations for satisficing, Journal of Planning Education and Research Vol. 26 Iss. 1". [52]

Rogaczewska, N. (2018), *Danish non-profit social housing and mortgage insitutes*, https://hypo.org/ecbc/publication-news/danish-non-profit-social-housing-mortgage-institutes-common-stand-future-financial-regulation/. [61]

Rosenfeld, O. (2017), *Interpreting the term 'affordable housing' in the Housing Partnership*, European Commission, https://ec.europa.eu/futurium/en/system/files/ged/briefing_note_2017_interpreting_the_term_affordable_housing_-_march_2017.pdf (accessed on 20 September 2019). [9]

Salvi del Pero, A. et al. (2016), "Policies to promote access to good-quality affordable housing in OECD countries", *OECD Social, Employment and Migration Working Papers*, No. 176, OECD Publishing, Paris, https://dx.doi.org/10.1787/5jm3p5gl4djd-en. [84]

Sánchez, A. and D. Andrews (2011), "To Move or not to Move: What Drives Residential Mobility Rates in the OECD?", *OECD Economics Department Working Papers*, No. 846, http://dx.doi.org/ttps://doi.org/10.1787/18151973. [112]

SEB (2019), *Ko banka ņem vērā, piešķirot kredītu ikdienas vajadzībām?*, https://www.seb.lv/info/personigas-finanses/ko-banka-nem-vera-pieskirot-ikdienas-kreditu (accessed on 28 April 2020). [14]

Shoag, D. and L. Russell (2018), *Land Use Regulations and Fertility Rates*, Springer, http://scholar.harvard.edu/files/shoag/files/zoning_book_chapter.pdf. [78]

State Housing Development Fund (2019), *Annual Report*, https://www.sfrb.sk/wp-content/uploads/2020/04/Vyrocna-sprava-za-rok-2019.pdf. [57]

Statistics Canada (2019), *Canadian Housing Survey*, https://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=5269 (accessed on 13 January 2020). [21]

Stats NZ Tatauranga Aotearoa (2020), *NZ.Stat*, http://nzdotstat.stats.govt.nz/wbos/Index.aspx?_ga=2.14050238.848873880.1579257167-192954013.1578914340 (accessed on 17 January 2020). [96]

Stephen Ezennia, I. and S. Hoskara (2019), "Methodological weaknesses in the measurement approaches and concept of housing affordability used in housing research: A qualitative study", *PLOS ONE*, Vol. 14/8, http://dx.doi.org/10.1371/journal.pone.0221246. [8]

Stone, M. (2006), "A Housing Affordability Standard for the UK", *Housing Studies*, Vol. 21/4, pp. 453-476, http://dx.doi.org/10.1080/02673030600708886. [93]

Stone, M., T. Burke and L. Ralston (2011), "The Residual Income Approach to Housing Affordability: The Theory and the Practice", http://works.bepress.com/michael_stone/7 (accessed on 17 January 2020). [95]

Swedbank (2019), *Baltic Housing Affordability Index - 2019Q1*. [16]

Szabó-Morvai, Á. et al. (2019), "Evaluation of family policy measures and their impact on fertility", *HÉTFA Research Institute*, https://ec.europa.eu/hungary/sites/hungary/files/docs/hetfa_fertilitymodels_20190701.pdf. [82]

Taşan-Kok, T. et al. (n.d.), "Providing Cheap Land for Social Housing: Breaching the State Aid Regulations of the Single European Market?", http://dx.doi.org/10.1080/00343404.2011.581654ï. [60]

van der Vlist, A. et al. (2002), "Residential Mobility and Local Housing-Market Differences", *Environment and Planning A: Economy and Space*, Vol. 34/7, pp. 1147-1164, http://dx.doi.org/10.1068/a34176. [33]

Vignoli, D., F. Rinesi and E. Mussino (2013), "A home to plan the first child? Fertility intentions and housing conditions in Italy", *Population, Space and Place*, Vol. 19/1, pp. 60-71, https://doi.org/10.1002/psp.1716. [68]

Whitehead, C. and P. Williams (2018), *Assessing the evidence on Rent Control from an International Perspective*, LSE London, https://research.rla.org.uk/wp-content/uploads/LSE-International-Evidence-on-Rent-Control-Report-2018-Final.pdf (accessed on 17 September 2019). [62]

World Bank (2020), *Doing Business 2020*, http://dx.doi.org/10.1596/978-1-4648-1440-2. [86]

World Bank Group (2014), *The Residential Energy Efficiency Program in Lithuania, Case Study. Prepared by Viktoras Sirvydis*. [55]

Endnotes

1 Eurostat (2016[106]) defines severe housing deprivation as the simultaneous occurrence of overcrowding together with at least one of the following housing deprivation measures: leaking roof, no bath/shower and no indoor toilet, or a dwelling considered too dark.

2 There are also a small number of middle-income households that find themselves "below" the missing middle because they qualify for housing benefit. These are households that have a relatively low before-transfer income (and therefore qualify for housing benefit) but also receive a relatively large amount in public cash transfers. As a result, they have relatively high after-transfer incomes, and therefore find themselves around or above the median on the equivalised after-transfer disposable income scale.

3 Law on Residential Tenancy, Section 28, Legal Acts of the Republic of Latvia, https://likumi.lv/ta/en/en/id/56863-on-residential-tenancy (access in March 2020).

4 Families must produce one child within four years of the approval of the FHA, and a second child within eight years. If ultimately no child is produced, the couple is obliged to return the allowance plus interest at the market rate (in the case of legitimate, e.g. medical, reasons, the couple is exempt from the interest payment).

5 EUROMOD is a tax-benefit microsimulation model for the European Union that enables researchers and policy analysts to calculate, in a comparable manner, the effects of taxes and benefits on household incomes and work incentives for the population of each country and for the EU as a whole. The results presented here are based on EUROMOD version I2.0+. EUROMOD is maintained, developed and managed by the Institute for Social and Economic Research (ISER) at the University of Essex, in collaboration with national teams from the EU member states. The process of extending and updating EUROMOD is financially supported by the European Union. The results and their interpretation are authors' responsibility.

6 For instance, the income threshold in 2019 was a minimum of EUR 9 546. The maximum income was EUR 38 146 for a single person household, EUR 41 955 for a single person with a disability and EUR 57 213, increased by EUR 3 809 for every child or person with a disability, for every other type of household. For certain areas, the maximum income threshold is increased by approximately 5%.

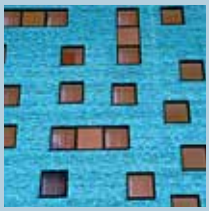
7 The net minimum wage has been chosen as a starting point because this limit is used in the earnings disregard currently in place in Latvia for the means test of Guaranteed Minimum Income and the housing benefit for beneficiaries who start a new job. The precise net minimum wage for each particular individual/household will vary slightly based on personal and family characteristics, such as number of children, age, etc. The threshold of EUR 320 has thus been used as a proxy. A fixed threshold is applied here because in these simulations the earnings disregard is applied at the household, rather than individual, level. Reforms 3 and 4 are intended to demonstrate the sensitivity of outcomes to different values of the threshold.

Housing affordability and quality are pressing challenges in Latvia. While Latvian households spend, on average, less on housing than their OECD peers, many are stuck in poor quality housing. Residential investment has stagnated since 2008, and the housing stock – much of which was built during the Soviet era – has been insufficiently maintained. In the face of these challenges, public support for housing is limited, with a large share of households who are too rich to be eligible for benefits and social housing, yet too poor to qualify for a commercial mortgage. Meanwhile, an underdeveloped rental market further limits affordable housing alternatives.

This study builds on the extensive work conducted by the OECD on housing and economic development to help Latvia address some of these challenges.

The study highlights the need for Latvia to develop a long-term, well-resourced comprehensive housing strategy. Drawing on cross-country experience and a series of illustrative simulations of different types of public support for housing, the study provides practical policy directions to inform the implementation of this strategy. Key recommendations include facilitating long-term housing investment, calibrating housing support for different types of households, developing a more affordable, attractive private rental market, and improving the measurement and monitoring of housing affordability and quality.

The study is the result of the work of an interdisciplinary OECD team bringing together the Economics Department and the Directorate for Employment, Labour and Social Affairs, with the support of the Ministry of Economics of the Republic of Latvia.



This study contributes to the cross-cutting OECD Horizontal Project on Housing.

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