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Workshop on housing affordability

Challenges and priorities for improving housing affordability in the region of the United Nations Economic Commission for Europe

Note by the Real Estate Management Advisory Group

Summary

The present document has been prepared in response to the request of the Committee on Urban Development, Housing and Land Management at its eighty-fourth session (Geneva, 4–6 October 2023), to conduct a survey of Economic Commission for Europe (ECE) member States on “Improving Housing Affordability and Climate-Neutrality in the ECE Region” as a follow-up to the 2020–2021 survey. It has been prepared by the ECE Real Estate Management (REM) Advisory Group, under the leadership of its Chair, Paloma Taltavull, in consultation with the Chair of the Committee Bureau and with support from the secretariat.

The document provides a summary of the main outcomes from the 2024 survey and a subsequent study on housing affordability conducted by the Advisory Group. It includes quantitative data from 32 ECE member States to support these findings. Besides identifying key challenges, the document offers policy recommendations and best practices for improving housing affordability. It emphasizes the significant variability in housing markets and the critical impact of housing costs on poverty, highlighting the need for robust policy measures to effectively address these issues.

The document will inform discussions at the workshop on housing affordability held during the Committee session. Please also refer to the Executive Summary of the present document as contained in the official document ECE/HBP/2024/4 and to the discussion paper for the workshop (ECE/HBP/2024/3). The Committee is invited to take note of the information provided.

Introduction

1. This document summarizes the results of an online survey on housing affordability in the United Nations Economic Commission for Europe (ECE) region, conducted in January and February 2024 by the ECE Real Estate Market Advisory Group for Sustainable, Climate-Neutral and Energy-Efficient Buildings and Cities (the Advisory Group). The survey and the subsequent study were initiated following the decision of the Committee on Urban Development, Housing and Land Management (the Committee) at its eighty-fourth session (Geneva, 4–6 October 2024), [1] as a follow-up to the survey of 2020-2021. The survey aimed to help understand the evolution of housing affordability in different countries, subnational regions, and cities, and to identify the causes of affordability issues. The survey questionnaire was designed to assess whether the lack of affordable housing is perceived as a severe problem and to highlight initiatives and best practices addressing this issue in the ECE region.

2. The survey was shared with 282 representatives from governments, cities, and non-profit organizations, receiving 56 qualified responses from 28 ECE member States [2], resulting in a 20.2 per cent response rate. In addition to the survey results, this document draws from statistical data from Eurostat [3] on 32 of the 56 ECE member States [4], representing 57 per cent coverage, with 16 of these States also among the survey respondents. These statistics provide insights into housing construction, affordability and homeownership rates for different household types in each country. A brief statistical overview complements the survey findings and quantifies housing unaffordability levels in different countries.

3. This document also examines the housing affordability situation in 32 European countries, with a focus on households currently residing in homes. It evaluates the current state of housing cost payments and their impact on the standard of living. This analysis is conducted "ex-post," meaning it considers households that are currently maintaining housing costs. Challenges related to initial housing entry are not covered in this document but will be addressed in future studies.

4. The general results from the questionnaire provide a comprehensive understanding of how the respondents identified and conceptualized the housing affordability problem, emphasizing its complexity and multidimensional nature. The respondents primarily focused on the most pressing aspects of housing affordability within their respective territories. The survey findings were corroborated by statistical data, effectively quantifying housing affordability and revealing significant heterogeneity in the housing markets across different countries.

5. Housing affordability problems arise when households struggle to cover their housing costs. When these costs exceed a certain threshold of household income, it can prevent households from meeting other essential needs such as transportation, education, energy and food. A reduction in the quality and quantity of meals increases the likelihood of illnesses. This document does not examine the decline in consumption due to rising housing costs but acknowledges that this issue significantly impacts the overall economy.

6. The literature has explored how housing affordability issues can increase a household's risk of falling into poverty. The concept of "housing-induced poverty," introduced by Kutty (2005), estimates the impact of housing costs on household poverty or deprivation. According to this concept, a household is considered to be in housing-induced poverty if, after covering housing costs, their remaining income falls below two-thirds of the poverty line. This measure helps to distinguish whether a household's poverty is due to insufficient income or high housing costs.

7. The significance of housing costs in understanding the complexity of poverty is substantial. Tunstall and others (2013) assert that neglecting housing costs leads to a significant underestimation of the risk of poverty and material deprivation, especially for workless households, minority ethnic groups, single individuals, and renters. They emphasize that low-income individuals and renters are the primary groups vulnerable to poverty due to housing costs. Some research identifies this as a global vicious cycle and proposes housing as a new tool for poverty policy measures (Saiz, 2023). However, much of the literature

[1] ECE/HBP/219, para. 31(b).

[2] Albania, Andorra, Austria, Bosnia and Herzegovina, Bulgaria, Canada, Croatia, Czech Republic, Estonia, Finland, France, Georgia, Greece, Italy, Latvia, Montenegro, North Macedonia, Norway, Poland, Republic of Moldova, Russian Federation, Slovak Republic, Spain, Switzerland, Türkiye, United Kingdom of Great Britain and Northern Ireland, Ukraine and the United States of America.

[3] https://ec.europa.eu/eurostat/data.

[4] Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland.

fails to clearly define the channels through which housing affects poverty, increases deprivation, or leads to extreme situations like homelessness.

8. The relevance of this issue is critical for any society aiming to maintain a healthy population, particularly in urban economies. Homelessness represents the extreme case of poverty, while low-income households strive to meet their housing needs by paying minimal costs, often resulting in poor-quality housing. These substandard homes are typically overcrowded and concentrated in disadvantaged neighbourhoods, where the cycle of poverty perpetuates the degradation and expansion of marginal urban areas.

9. The impact of housing costs on poverty has intensified since the global financial crisis (GFC), mainly due to the significant disruption it caused in the construction of affordable housing. This market disruption led to the failure of existing housing policy measures, pushing many countries to identify and attempt to define new tools, though with limited success (UNECE, 2015; Warsame and others, 2010).

10. This report aims to identify the role of housing costs in explaining the lack of housing affordability through comprehensive data analysis. It examines households facing extreme economic challenges in meeting their housing costs, providing a detailed breakdown by country. The report presents empirical evidence related to various household situations, such as poverty, housing tenancy, and household type, using academically accepted measures to estimate housing affordability with real data. The evidence spans the period of economic growth, GFC, the start of the recovery, and the pandemic period (2004-2020). By analyzing existing affordability problems across countries, this report seeks to identify specific issues negatively impacting populations and provides insights for defining more precise policy measures.

11. This document is organized into six sections. Section 1 reviews the literature and defines the empirical measures to be applied. Section 2 presents the data sources, including surveys and datasets, providing initial insights. Section 3 discusses the challenges and recommendations raised by respondents to the questionnaire. Section 4 explores best practices in the ECE region for addressing housing affordability. Section 5 describes evidence from European Union member countries based on housing affordability data. Section 6 provides general conclusions.

I. Literature review and measurements

12. Traditionally, housing problems have been analyzed from the perspective of affordability. This concept measures a household's ability to pay housing costs based on its income level, focusing on whether the household income is sufficient to obtain adequate housing. In the United States, public policy has often viewed the lack of accessibility as a poverty issue, leading to policies that support housing demand. In contrast, European housing policy measures tend to address the lack of available affordable housing, emphasizing the supply side through social housing and urban development planning (Gabriel and others, 2005).

13. Stone (2009) defines affordability as a relationship between housing and individuals. For some, housing is affordable regardless of price, while for others, no housing is accessible regardless of how inexpensive it may be. The relationship between housing and individuals can change with shifts in the housing market, financial conditions, or family situations, highlighting the cyclical nature of this problem - a home that was affordable in the past may no longer be so as economic conditions change. Maclennan and Williams (1990) argue that accessibility involves securing a certain standard of housing at a price or rent that does not impose an excessive burden on household income. Bramley (1990) specifies that households should be able to obtain housing that meets appropriate standards and leaves them with enough income to live above the poverty line.

14. Hancock (1993) emphasizes that housing consumption is essential to meet basic needs, but it is also necessary to guarantee a minimum level of non-housing consumption. The concept of inaccessibility and the inability to obtain market-offered housing on average household conditions imply asymmetric cyclical effects. Quigley and Raphael (2004) note that increasing residential prices may reduce tenants' ability to access property, while potentially increasing accessibility for future owners. Measurement difficulties arise from changes in individual circumstances over time (Bramley, 2006). Poor accessibility threatens societal cohesion and imposes significant economic limitations by affecting access to work, putting pressure on wages, and displacing other forms of consumption (DTZ Research, 2004).

15. The economic literature on housing affordability focuses on two main aspects: purchase affordability or the ability to borrow sufficient funds to buy a home and repayment affordability or the ability to meet mortgage payment obligations (Gan and Hill, 2008). Housing affordability must consider residual

household income after housing expenses and whether households meet socially acceptable standards (Hancock, 1993; Burke and Ralston, 2004; Stone, 2009). When families cannot achieve sufficient residual income after housing payments, they experience housing stress, which identifies poverty resulting from meeting residential needs (Gabriel and others, 2005).

16. Literature also evaluates conditions for affordable housing to avoid deprivations. Housing should meet minimum quality standards (Maclennan and Williams, 1990; Bramley, 1990; Hancock, 1993; Field, 1997; Thalmann, 1999, 2003; Lerman and Reader, 1987). Gabriel and others (2005) describe affordable housing as low-cost housing, irrespective of tenure or household size. Measuring accessibility traditionally follows two approaches: the “ratios” approach and the “residual” approach (Meen, 2018).

17. In the ratios approach, accessibility is measured through indexes based on indicators of income and expenditure, along with other economic variables, to obtain a threshold reference value. The most commonly used measure is the Affordability Ratio, often referred to as the debt-to-income (DTI) ratio. This ratio relates the total annual payments for housing to the annual income of the family unit and is typically set at a value close to 30 per cent. Other ratios used include the loan-to-value (LTV) ratio or the price-to-income (PTI) ratio, primarily for first-time homebuyers, but these are not included in this document.

18. The residual approach analyses the amount of household income remaining after paying the costs of adequate housing. This approach develops indirect affordability measures to evaluate whether housing costs may risk pushing a household into poverty and exclusion. It examines the households' ability to maintain their basic consumption levels while allocating an increasing portion of their income to housing expenses.

19. By doing so, a household could reduce its residual income, thereby diminishing the basic consumption necessary for the welfare of its members. This situation leads to "induced poverty for housing" (Kutty, 2005, 2007) or "shelter poverty" (Stone, 1993). The standard measure of shelter poverty is defined as the difference between disposable income and the costs required to achieve a minimum standard of non-housing consumption, resulting in residual income. Any household paying excessive housing expenses that reduce the residual income below this threshold would be classified as "shelter poor." This measurement is difficult to estimate (non-observable) because the set of non-housing expenses varies across household characteristics. However, the literature suggests that this assessment should be made before classifying households under a “Family Budget Standard” (Stone and others, 2011).

20. From this perspective, property itself is not a cause of poverty but rather a factor that triggers it. This is particularly evident when people have very limited access to housing, such that their inability to pay rent or mortgage debt results in housing loss, which in turn leads to deprivation and puts households in a situation of high dependency and insecurity. This explains why households often prioritize housing costs over other basic expenses like food or clothing.

21. Thalmann’s (2003: pp.294-295) three affordability conditions combine previous measures and theoretically explain the possibilities of a household finding housing unaffordable. Using these three affordability conditions, the hypotheses are:

(a) Residual income: Housing is considered affordable if the residual income is not less than the standard non-housing expenditure (also known as Kutty’s housing-induced poverty condition[5]).
(b) Income proportion: Housing is considered affordable if housing expenditure does not exceed a given proportion of household income (ratios perspective).
(c) Expenditure level: Housing is considered affordable if housing expenditure does not exceed a specific absolute level.

22. Each condition defines the following situations for households:

(a) Under-consumption of housing: Households can pay but are not willing to ("can pay, won’t pay" as described by Hancock, 1993: p. 131);
(b) Over-consumption of housing: Households consume more housing than necessary and can afford to pay for it;
(c) Over-housing: Households have relatively higher housing expenditures compared to non-housing consumption, even though they are not classified as living in poverty.

[5] Housing-induced poverty is understood as the situation where a household cannot afford the basic basket of non-housing goods after paying for housing costs (Kutty, 2005:118-119).

23. These conditions and their respective situations provide a comprehensive framework for understanding housing affordability and the various ways households experience housing-related financial challenges.

The "ratio" approach

24. The ratio approach is the most commonly used method for calculating housing affordability due to its simplicity. The ratios calculated include the debt-to-income (DTI) ratio, which reflects the relationship between the annual housing payments and the annual household income (see equation (1)). The commonly accepted threshold value for this ratio is 30 per cent. If this ratio exceeds 30 per cent, a household is considered to have housing affordability problems with respect to its income (Gabriel and others, 2005). This ratio has been used to measure the lack of affordability for homeownership (where the numerator is the amount of mortgage costs) and to assess the rental market (where the numerator is the amount of rent paid).

25. The definition of DTI is described as below:

Equation (1) $$DTI_{ownership} = \left[\frac{(Annual\ loan\ repayment + Interests)}{Annual\ income}\right]$$

$$DTI_{rent} = \left[\frac{Annual\ rent\ payment}{Annual\ income}\right]$$

26. The DTI index identifies the proportion of household income that should not be exceeded after paying for housing of adequate size and quality. It establishes a relationship between housing costs and disposable income, providing an objective measure of housing affordability (Stone, 2006).

27. Another method for measuring housing affordability using the DTI ratio is to calculate housing stress, also known as the H30/40 index. This index assesses whether a household falls within the lower 40 per cent of the income distribution and if its housing payment exceeds 30 per cent of its income. The formula for housing stress is the same as in equation (1) but applies only to households with income below the fourth quartile in the income distribution. In the literature, different forms of income calculations are used, including pre-tax or post-tax income (Gabriel and others, 2005). However, this study bases its approach on annual disposable income.

28. Furthermore, the H30/40 indicator is used to estimate transitional housing poverty and the risk of falling into poverty if experienced over several consecutive periods. This method helps identify households that, while not currently classified as poor, are at significant risk of falling into poverty due to high housing costs.

29. Stone (2006, p. 162) argues that this approach lacks a theoretical or logical foundation. However, although it is generally recognized as imprecise and possibly reflective of personal preferences in high-income groups, the DTI ratio remains a relatively objective measure, allowing for comparability among different groups (Stone, 2009; Hulchanski, 1995; Kutty, 2005).

30. Affordability ratios are correlated with income, indicating that certain household groups may be disadvantaged depending on the availability of affordable housing supply. While the responsibility of the supply side to address affordability problems is generally accepted, it has been relatively understudied.

31. The second method, the 'residual income' approach, is also not a perfect benchmark. Material deprivation and over- or under-consumption of housing are difficult to quantify (Stephens and van Steen, 2011, p. 1040), and overconsumption is often voluntary. The residual income approach does not provide a direct measurement for estimating housing unaffordability.

32. Empirical evidence is extensive when using the ratios approach. Quigley and Raphael (2004) find that affordability problems are typically concentrated in households with lower income, such as very young individuals or elderly households, and are less common when households are at the peak of their lifetime income (Ceriani and others, 2023). There is substantial evidence that tenure status affects household income, with homeowners generally having higher average incomes than other households (Gabriel, 2005; Tunstall and others, 2013, Hulse and others, 2010). This may indicate that poverty thresholds differ depending on housing tenure (Taltavull and Juarez, 2014).

33. Housing affordability rates are calculated for the 1st and 4th quintile groups of income distribution, providing a more precise reflection of disparities within the distribution sample. This involves using an additional DTI measure that relates to extreme income distribution cases[6].

34. Overall, empirical evidence highlights that housing affordability problems are more common among lower-income groups and are influenced by tenure status, underscoring the need for targeted policy measures to address these issues effectively.

35. Over the last decade, housing affordability problems have substantially increased (Taltavull, 2022, Yates and others, 2007; Saiz, 2023; Haffner and Hulse, 2021) due to the legacy of GFC, which led to lower financing volumes (Mccord and others 2011). Property markets experienced tighter lending conditions and a decrease in the supply of new housing, forcing low- and middle-income households in need of financing to become homeowners to turn to the rental market. Tightness in rental markets is increasing due to both endogenous reasons and the aforementioned dynamics, which have been accelerating with the recovery following the global financial crisis. These combined influences have worsened the urban affordability problem in the 21st century, leading to a new dimension concerning the lack of affordability associated with global housing price trends (Duca, 2020), demographic changes in different groups (Taltavull and Gibler, 2023) and lack of housing supply (Molloy and others, 2022; Glaeser and Gyourko, 2018). This situation also casts doubts on the effectiveness of traditional policies in addressing housing affordability (Wieser and Mundt, 2014; Schmidt, 2019; Meen and Whitehead, 2020).'

36. The accessibility problem now arises not only at the initial entry point for households (the first barrier to homeownership is primarily the availability of savings) but also for those who have already secured housing, possibly over a long period. This is due to periodic rent revisions for rented properties or increases in the interest rates on borrowed capital for properties purchased with variable-rate loans, both of which increasingly affect middle-income households.

37. Rising rents have been the fundamental source of unaffordability from the recovery after GFC until the impact of the COVID-19 crisis. Any variation in rental prices increases uncertainty for households most exposed to housing cost increases, potentially modifying fundamental life decisions such as household formation or childbearing. These changes can have irreversible effects on society. The differing sources of residential affordability problems highlight the multidimensional nature of this phenomenon and its occurrence in cities with varying characteristics.

38. Residential affordability problems may create a ceiling for households, as described by Gyourko and others (2013). These problems arise not only from rising residential prices and rents and a shrinking supply of new units but also from the existence of wealth assets and intergenerational and spatial inequalities. These issues often fall within the domain of urban rather than social policy (Haffner and Hulse, 2021).

Methodology, observations and analysis

39. The purpose of this report is to estimate the housing affordability situation "ex-post" across European countries to identify the concentration of affordability challenges. The goal is to apply the ratios approach to classify households experiencing affordability problems and to identify their features, providing valuable information for policy purposes.

40. The methodology followed in this paper begins with calculating the true value of each affordability ratio at the household level. There are two levels of housing poverty severity measures:

(a) Affordability ratio: debt/rent to income:

Equation (2) $$DtI_t = \frac{Hexp}{Inc_t}$$

where Hexp= $(A + int_t)\ or\ rent$

(b) Housing stress: the percentage of housing costs relative to income for households that fall within the bottom 40 per cent of the income distribution (Hs):

[6] The worsening of income distribution globally as source of inequality has been well documented in the literature. See in Alvaredo, Atkinson, Piketty, and Saez, 2013; Piketty and Saez, 2014, Piketty, Saez and Arkinson, 2011; Hlasny and Verme, 2015; Milanovic, 2000)

Equation (3) $$DtI_t|(inc_t \leq 40\%) = \frac{Hexpt}{Inc_t}$$

41. Following the calculations, the results are presented, emphasizing the role of housing burdens, tenancy types and poverty by country. The poverty line is also estimated according to the official Eurostat definition, which considers a household to be in poverty if its income falls below 60 per cent of the median equivalised income distribution in its country.

II. Survey and data description

42. The survey targeted four types of institutions: public (governments), non-profit organizations (agencies of public institutions), private institutions and academia. The responses were predominantly from public organizations (69.6 per cent), with non-profit organizations representing 16.1 per cent, private institutions 12.5 per cent and academia 1.8 per cent. The survey focused on three areas corresponding to the expertise of the responding institutions: housing tenure and housing affordability; transparency of housing laws and policy and urban and spatial planning.

43. The broad spectrum of the respondents' institutions shows that housing covers a wide variety of areas and aspects, including regulation, construction, finance, planning, housing-related social services and the management of social housing. Specifically, 55.4 per cent of respondents focused on housing policy and regulation, 50 per cent on urban planning, 46.4 per cent on housing construction or renovation and 35.7 per cent on land administration. Areas with relatively lower focus included housing finance (30.4 per cent), social housing management (33.9 per cent) and the provision of social services (25 per cent).

44. Nearly half of the respondents highlighted other crucial areas related to housing, including data collection and research, environmental protection, taxation, public health and reconstruction. The diverse expertise indicated by the respondents suggests that the survey outcomes build on a robust knowledge base in the fields of housing affordability, urban resilience, urban planning and land use administration.

45. The survey indicated that multiple measures or tools were used to identify the housing affordability problem and its scope: 60.4 per cent of respondents focused on market observation, commonly using key economic indicators such as income levels (50.9 per cent) and unemployment trends (32.1 per cent). Other complementary information sources included the number of households seeking housing support (54.7 per cent).

46. The survey highlights the importance of monitoring housing affordability by developing initiatives for data exchange in cooperation with relevant ministries and compiling specific existing information related to the housing market. The establishment of a centralized "observer" service to coordinate data collection across countries would be an effective tool for tracking housing affordability issues more accurately.

Data analytical source

47. The data source used for this analysis is the European Union Statistics on Income and Living Conditions (EU-SILC) from 2004 to 2020, cross-section files. The sample dataset consists of more than 3.4 billion observations aggregated at the household level for 32 European countries. The EU-SILC database provides harmonised information on poverty, inequality, standard of living and other social issues within European member states and associated countries. It allows for gathering detailed information on households' income, material and demographic conditions, financial situation, housing situation and social relations. This survey provides data at the regional level (NUTS II).

48. There have been changes in the methodology during 2013 and 2021, but the source has homogenised the data. The income data is self-reported by surveyed households and combined with information from household income tax records in some countries. As the most recent methodological change has altered the data structure since 2021, this document analyses data up to 2020.

49. The micro-database contains housing information, income and household details, as well as personal information, combining both household and personal datasets (part of EU-SILC). This allows the paper to estimate the following indicators at the country level:

(a) Income distribution: Based on equivalised disposable income and the Gini Index;
(b) Poverty line: A household is considered to be in poverty when its equivalised disposable income is less than 60 per cent of the national median equivalised disposable income (Eurostat, 2011);
(c) Affordability ratio: As defined by equation (1);

(d) Housing stress: As defined by equation (2).

Basic dataset description[7]

50. The list of countries analysed is provided in table A1, covering from 2004 to 2020. In total, 32 countries are included: 14 since 2004, 12 since 2005, four since 2007 (Romania, Bulgaria, Switzerland and Malta), one since 2010 (Croatia) and one since 2013 (Serbia). The EU-SILC survey is representative at the household level regionally, providing strong confidence in the descriptions related to household types, income features, and housing issues. The dataset observes around 215-220 million households per year across these 32 countries (see table A2), with observations allocated proportionally to each country's population.

51. The following sections describe this population, considering household types and poverty rates from both a static perspective (treating all data as non-periodic) and a dynamic perspective (yearly evolution), allowing for assumptions based on real data.

Households

52. Panel A of figure 1 shows the average household types in European countries. Overall, 39 per cent of households consist of two or more adults with dependent children, 32 per cent are single-person households, 15.2 per cent are households with two adults younger than 65 and 13.3 per cent are households with adults older than 65. Table A3 in the annex shows the full data.

53. The structure of households varies across countries. Panels B, C, and D of figure 1 illustrate the concentration among household types. Panel B shows that Germany, Denmark, Finland, Norway and Sweden have the largest share of single-person households (more than 40 per cent of total households), while Cyprus, Spain, Greece, Ireland, Malta, Portugal, and Slovakia have the lowest share (around 20-22 per cent). Panel C indicates that Croatia, Ireland, Portugal, Serbia and Slovakia have more than 50 per cent of their households with dependent children, while Germany, Denmark, Finland, Norway and Sweden have less than 30 per cent.

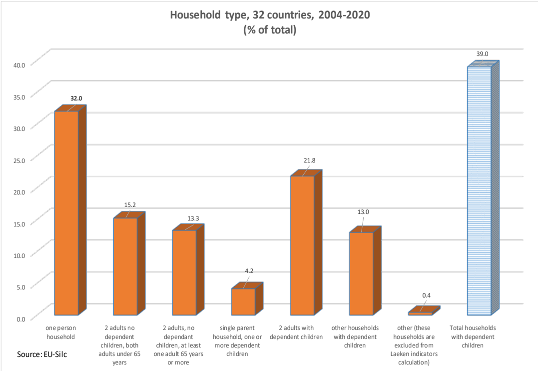
54. The distribution of single-parent households (one adult with children) differs in panel D. Belgium, Denmark, Estonia, France, Ireland, Iceland, Lithuania, Latvia, Norway, Sweden and the United Kingdom of Great Britain and Northern Ireland (the United Kingdom)had more than 5 per cent of their households led by one adult with children. Additionally, panel D shows a similar share of couples younger and older than 65, around 15 per cent each of total households. Countries where couples older than 65 outnumber younger couples include Bulgaria, Cyprus, Greece, Croatia, Italy, Portugal, Serbia and Slovenia.

55. In summary, Northern European countries concentrate a larger proportion of single-person households, while Southern, Central, and Eastern European countries have a higher concentration of households with children.

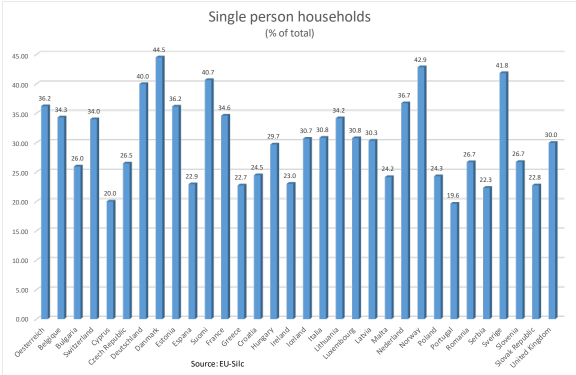
[7] Most of the data is presented through figures that include all the countries, which can make them difficult to visualize. However, we believe these figures provide a quick overview of how the problem is established at the European level. Each figure has an accompanying data table, available upon request.

Figure 1
Household structure

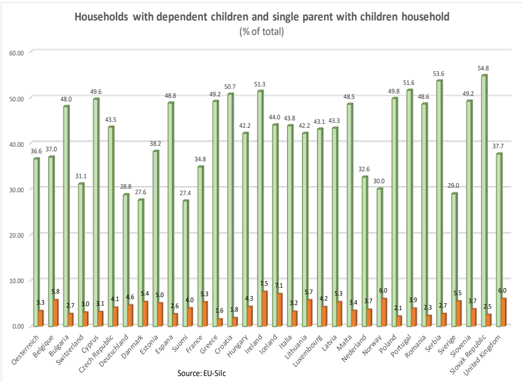
Panel A



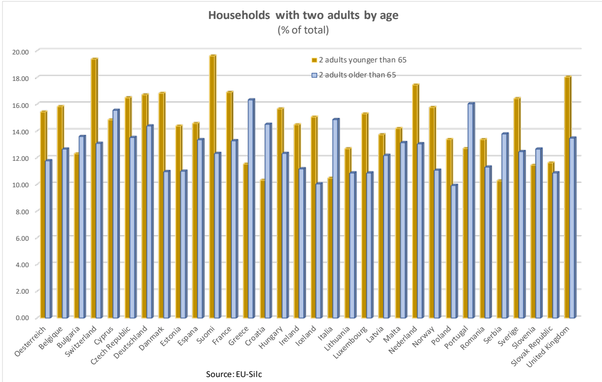
Panel B



Panel c



Panel D



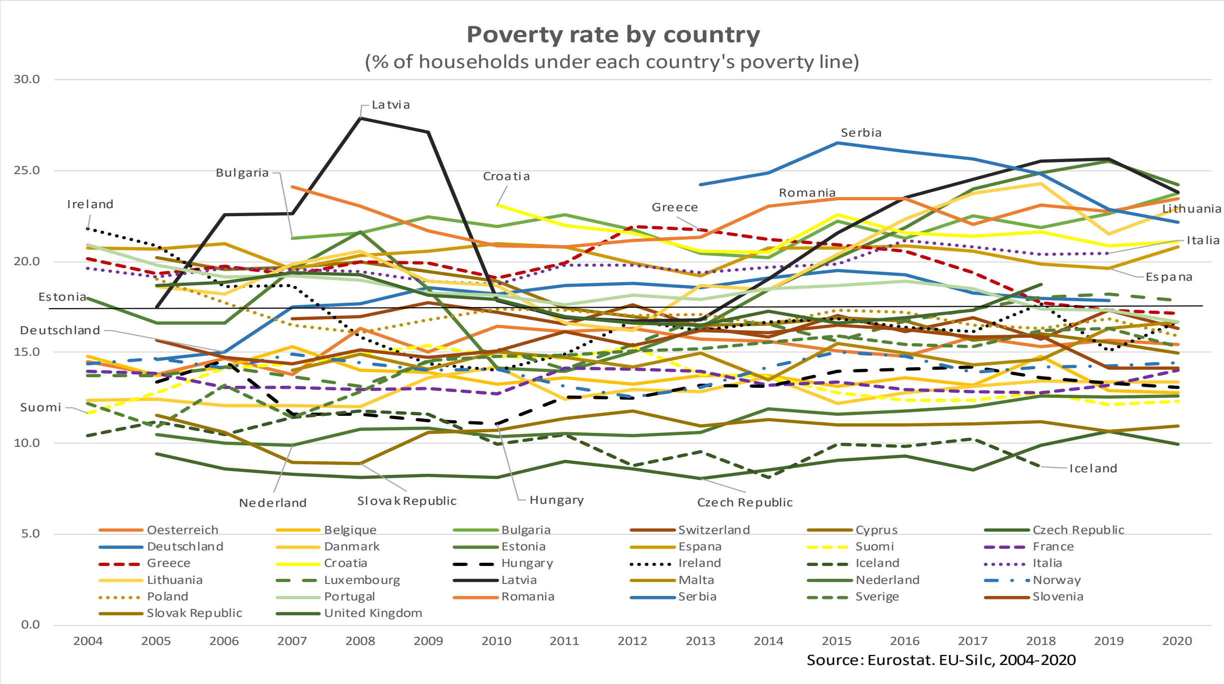
Poverty

56. The poverty line has been calculated based on the median income distribution at the country level, by year. This calculation allows for a precise estimation of each country's yearly poverty rate for comparative purposes. Observing these calculations, some stylized facts emerge.

57. Firstly, the poverty rate is widely distributed around an average of 17 per cent, indicating that, on average, 17 per cent of households in European countries have a yearly income equal to or below the poverty line. This average reflects varying distributions across different countries, which are discussed below. Secondly, the poverty rate shows a degree of volatility in some countries while remaining very stable in others.

58. Notably, the poverty rate rose to 17 per cent following the 2007 GFC and remained at that level until 2014. Between 2015 and 2018, it increased to an average of 17.5 per cent, then experienced a reduction in the last two observed years. The average poverty rate presents significant differences among countries, as illustrated in figure 2. The poverty distribution does not appear to follow a clear geographical pattern. Most countries exhibit stable evolution, suggesting a long-term issue with poverty rates. However, Latvia, Ireland and Greece have significantly reduced poverty rates, while others have experienced increases.

Figure 2



59. The larger volatility in poverty rates is common in certain countries, although there is no clear geographical pattern. Estimating a standardized measure of volatility, Table 1 shows that Estonia, Luxembourg, Latvia and Malta have the highest probability of experiencing fluctuations in their poverty rates. This aspect is particularly relevant because the poverty rate directly affects housing affordability.

Table 1
Poverty rate volatility in 32 countries

Country	*Rate*	*Country*	*Rate*	*Country*	*Rate*	*Country*	*Rate*
Austria	8.1	Estonia	21.8	Iceland	10.4	Poland	4.4
Belgium	4.1	Espana	8.0	Italia	6.4	Portugal	3.6
Bulgaria	8.3	Finland	8.1	Lithuania	11.8	Romania	5.2
Switzerland	7.2	France	5.0	Luxembourg	24.3	Serbia	7.0
Cyprus	3.3	Greece	8.1	Latvia	17.8	Sweden	16.1
Czech Republic	11.3	Croatia	4.5	Malta	17.6	Slovenia	9.7
Germany	8.8	Hungary	11.0	The Nederlands	11.8	Slovak Republic	7.2
Denmark	7.5	Ireland	9.5	Norway	10.0	United Kingdom	4.8

Source: Estimated from data in EU-SILC, 2004-2020.

III. Challenges of affordable housing and recommended policies

60. Housing affordability challenges were evaluated through a series of questions regarding different market features, with 75 per cent of respondents providing insights. The main challenges reported can be summarized as follows:

(a) Tenancy structure: Some countries have a high homeownership rate and a small rental market. Such tenancy structures often lead to affordability issues for new households frequently seeking rental units;

(b) Supply and demand imbalance: The survey highlighted market imbalance in many countries, where housing supply does not meet demand. The lack of new housing creates a supply constraint, while demand continues to rise. Some regions face a shortage of housing units, leading to unaffordable housing for both rent and ownership. Scarcity in both rental and ownership markets contributes to the affordability challenge, exacerbated by demographic growth or migration;

(c) Regulatory constraints: Some regions face challenges due to limited legal and regulatory frameworks supporting affordable housing initiatives. Issues include restrictive definitions of social housing eligibility and limited support for disadvantaged or socially less advantaged groups. Challenges related to the illegal occupation of public housing assets, poor regulation in the rental sector and the need for legal improvements to enhance rental affordability were also flagged. The lack of sufficient regulatory frameworks for rental housing, common in countries with dominant homeownership, exacerbates difficulties for certain demographics, such as young or lower-income individuals, to afford housing.

(d) Income disparity and rising costs: Most respondents indicated that economic growth, unequal income distribution and rising living and refurbishing costs are making it harder for people to afford housing. Low and middle-income groups struggle to afford housing due to inflation, high construction costs and insufficient funding for state housing programmes. Additionally, increasing costs of construction, land, energy and taxes contribute to higher property prices, both rental and owned. Although financing constraints were not directly identified, respondents highlighted that a lack of affordable mortgages and stringent lending standards limited access to homeownership for lower-income individuals.

(e) The spatial dimension: Affordability issues have a spatial dimension. Most responses (55.4 per cent), particularly from public institution representatives, highlighted housing affordability concerns primarily within major cities and urban areas. At the same time, a significant portion (35.7 per cent) of respondents identified the problem as widespread across the entire country. These variations may be attributed to country-specific differences, institutional factors or the impact of recent economic shocks. A detailed analysis of affordability issues at regional and urban levels would provide further clarification.

Causes and consequences of the lack of housing affordability

61. Respondents to the survey detailed the challenges related to housing affordability in their respective countries or cities. They indicated that market distortions aggravated housing affordability issues in many countries and suggested strategies for designing policy measures to support a better market allocation.

62. Key causes of the increasing unaffordability of housing that the survey highlighted included the following:

(a) Changes in demand structure: The increase in housing demand is due to population growth, increased household mobility and labour immigration. High housing prices, fuelled by inflation and strong demand, raise living costs by increasing the ratio of housing costs to income, thereby affecting affordability. Decreasing real household income, leading to an inability to cover housing costs, further exacerbates affordability issues;

(b) Supply shortages: Significant shortages in affordable housing supply are driven by low construction levels over the last decade, a lack of land or rental housing supply and low housing investment leading to poor maintenance and an ageing stock. Finance is scarce, with limited financial support for renters and stringent lending standards hindering affordable and social housing construction. Decreasing financial flows and expensive finance due to rising interest rates also contribute. Renovation shortages are prevalent, with a lack of funds leading to scarce renovation of housing stock and high maintenance costs that are unaffordable for mainly middle-income households.

63. The consequences of housing affordability flagged by the survey included "market distortion effects" that are clustered as follows:

(a) The need for legal security in the rental market, for example, to prevent illegal occupation of public housing;

(b) The absence of affordable housing in cities leads to the need to seek housing in inconvenient locations and endure long commutes. It also forces lower-wage workers out of urban areas, reducing the available labour force. Emerging socioeconomic effects related to high housing costs include delayed departure of young people from their parental homes; and middle-income groups losing access to the housing market, leading to a "housing poverty process". This process is characterised by the burden of housing costs causing households to fall below the poverty line, as well as the existence of "price-quality gaps" and a "housing price incentive paradox". The paradox is that landlords lack the motivation to renovate rental properties because strong housing demand keeps rents high regardless of improvements. This results in rental markets with low-quality housing but high rents. The proliferation of short-term rentals further reduces housing availability for low-income dwellers.

64. The survey respondents identified several needs for addressing housing affordability problems, including:

(a) The development of clearer conceptual and methodological frameworks that recognise adequate housing as a human right, in accordance with article 25 (1) of the Universal Declaration of Human Rights[8] and article 11(1) of the International Covenant on Economic Social and Cultural Rights,[9] and clarification of households protected by housing regulations;[10]

(b) Solutions for affordable housing that address the needs of informal settlers who cannot afford market rental prices and the development of new concepts for sustainable, human-centric housing;

(c) Advancements in the use of electronic tools for social housing setups and the development of datasets to effectively monitor housing affordability problems.

65. Given that the issues outlined in paragraph 14 above are common to several ECE member States, understanding their scale and dimension is crucial. Responses to the survey highlight that housing affordability challenges vary by region, with some areas experiencing severe problems, while others have little or none. Analysing the scale and regional impact is, therefore, essential for defining effective policy measures.

Specific tenancy effects

66. The survey collected respondents' perceptions of the causes of the worsening housing affordability situation for households for each of the two main tenancy types: ownership and rent.

67. Observations regarding unaffordability in the ownership tenancy field included:

(a) Private sector representatives expressed concerns primarily about land-related issues, such as regulatory challenges, lack of coordination, inefficiencies in permit management processes and lack of transparency in the administrative system;

(b) Public sector representatives indicated challenges in effectively managing and regulating land development. They identified the lack of funding, low energy efficiency of buildings, lack of political attention to urban development and lack of intersectoral coordination as key concerns;

[8] General Assembly resolution 217 A (III) of 10 December 1948.

[9] Adopted by General Assembly resolution 2200A (XXI) of 16 December 1966.

[10] See for example, the Services of General Economic Interest package adopted by the European Commission in 2012, available at https://competition-policy.ec.europa.eu/state-aid/legislation/sgei_en.

(c) General comments from respondents highlighted vulnerabilities of the urban systems to disruptive shocks, inefficient land use (favouring sprawl over compact development) and the underutilization of the existing housing stock;

(d) Non-profit institution representatives highlighted insufficient regulation for the provision of affordable housing, lack of funding, low energy efficiency and lack of intersectoral coordination between national, regional, and local authorities.

68. Responding public and private sector representatives perceived the affordability challenges in the housing rental market to be less significant than those in the ownership field. However, the causes of the existing challenges, as outlined in paragraph 17 above, were also relevant to the rental market.

Recommended instruments for addressing housing affordability challenges

69. This section summarizes the instruments that survey respondents deemed most relevant for addressing housing affordability problems. According to the responses, legislation stands out as the most essential and commonly utilized tool, with 83.9 per cent of respondents referring to its use. Legislation is complemented by other key tools, including policy instruments (67.9 per cent of respondents), strategies and programmes (66.1 per cent of respondents) and projects (39.3 per cent of respondents).

70. The survey also collected information about planned or future legislation, policy initiatives, instruments, strategies, programmes and projects to support housing affordability in the respective countries or cities of the respondents. The types of planned policy tools and initiatives are summarized below as follows:

(a) Supply-support policy tools: These initiatives include energy and climate-related plans, building renovation strategies and plans to improve social and municipal housing instruments for better accessibility. These tools also focus on providing affordable housing through housing construction and the development of affordability indicators, addressing issues related to unfinished buildings and homelessness, implementing urban master plans to support housing policies with financial support and regeneration of public assets, providing land plots for housing construction, and facilitating the return of empty apartments to the market;

(b) Demand-support policy tools: These initiatives involve offering low-interest loans for home purchases and subsidies for restoring empty dwellings, providing support for young homebuyers and enhancing e-mortgage services;

(c) Legislation and regulations: Planned legislative and regulatory measures include the introduction of new housing affordability laws and strategies, support programmes for single-family rental homes, housing laws, laws on social housing, basic principles of housing policy, comprehensive housing policy frameworks, national strategies for housing and changes to existing housing laws, a white paper on housing policy to the legislative body, resources related to property transactions and rental housing, and enacting legislation and implementing programmes to address housing affordability and assistance.

IV. Best practices for addressing housing affordability

71. The questionnaire collected 18 examples of practical experience considered by the respondents as representing best practices for addressing housing affordability problems. A brief description of each best practice case can be found in table 2, with more detailed information in the annex. These examples fall under four main areas: housing finance (30.8 per cent), access and availability of land for housing construction and renovation (26.9 per cent), housing governance and regulation (21.2 per cent) and environmental sustainability for housing (13.5 per cent). Most of the reported good practice examples were implemented at the national level (50 per cent), with local initiatives accounting for 28.1 per cent and regional best practices totalling 15.6 per cent. Additionally, a smaller proportion of best practices (6.3 per cent) were cross-border or involved multiple countries.

Table 2
Summary of reported best practices for addressing housing affordability

	Respondent's affiliation	*Country*	*Reported best practice*	*Further description and/or link for more information*
1	City of Vienna	Austria	The city of Vienna amended its Building Code in 2018 to include a "Subsidized Housing" zoning category. In these zones, two-thirds of the usable floor space for housing must be allocated to subsidized dwellings.	
2	Quebec Wood Export Bureau	Canada	1. Major investment in new affordable housing development; 2. Implementation of modern offsite industrialiser construction technique.	More information is available at www.cmhc-schl.gc.ca.
3	Ministry of Physical Planning, Construction and State Assets	Croatia	Croatia offers several support models, including the Stimulated Social Housing Programme with 9,000 apartments built, a subsidized housing loan programme for young people benefiting 34,000 families and the Inter-sectoral Cooperation Programme for families in need in assisted areas.	The subsidization of housing loans programme received 4,739 applications between 29 March and 14 May 2021. The average loan was EUR 75,000, with a 22-year repayment period and an effective interest rate of 2.17 per cent. The programme aims to support young families and demographic reconstruction by providing favourable loan conditions, including extended subsidies for additional children or disabilities.
4	Tallinn Property Department	Estonia	State-regulated guarantee for bank loans to buy homes.	
5	Ministry of the Environment	Finland	The state can provide guarantees for loans to build rental housing, with a maximum period of 30 years; additional interest subsidy loans were granted in 2009 and 2010.	
6	International consultant on architecture and urban development (Paris)	France	Cooperative housing construction initiatives	A cooperative housing project initiated by 11 families in the Paris suburbs offers housing at 3-4 times lower cost than buying a ready-made one, fostering a strong community.
7	Tbilisi City Hall	Georgia	Tbilisi City Hall has projects to assist those affected by unfinished constructions and to accommodate homeless families by purchasing and distributing real estate.	Tbilisi City Hall has a project to accommodate homeless citizens that aims to improve safety and satisfaction for over 400 individuals through financial, human and time resources, using official

	Respondent's affiliation	*Country*	*Reported best practice*	*Further description and/or link for more information*
				letters and government ordinances.
8	Municipal Heritage Department of Rome (*Assessorato Patrimonio Comune di Roma*)	Italy	An innovative programme for the urban regeneration of municipally owned buildings, focusing on quality of living and public interest activities.	The project regenerates public property to create affordable housing while preserving communities. It involves collaboration between local authorities, the national government and universities, benefiting over 400 vulnerable families, funded by national and EU resources.
9	Ministry of Economy of the Republic of Latvia	Latvia	A programme offers bank loan guarantees for families with children, along with a subsidy to reduce the first payment. The specific amounts of the guarantee and subsidy depend on the number of children and the energy efficiency of the home.	The Housing Guarantee Programme in Latvia provides guarantees ranging from 5-30 per cent of the loan amount, depending on the number of children. There are additional increases for energy-efficient homes. Since its implementation, the programme has supported around 25,000 families and involves a total investment of EUR 1.9 billion.
10	City of Podgorica	Montenegro	Implemented in cooperation with the Development Bank of the Council of Europe, this project has helped 1,500 families resolve housing issues with subsidies on mortgage interest rates.	A social housing project for medium- and lower-income citizens has provided housing solutions for 1,552 families across four phases. The project offers favourable loan conditions, including a fixed interest rate of 2.99 per cent and discounts on notary services.
11	Ministry of Local Government and Regional Development	Norway	The Norwegian State Housing Bank is the primary institution responsible for implementing housing policy in Norway.	Website: https://husbanken.no/english/
12	Ministry of Economic Development and Technology	Poland	Investments in energy-efficient housing for low- and average-income households.	Under the Polish National Recovery and Resilience Plan, investments aim to increase energy-efficient housing for low- and average-income households. The programme supports municipal housing, training and shelters, targeting a 20 per cent reduction in energy

	Respondent's affiliation	*Country*	*Reported best practice*	*Further description and/or link for more information*
				consumption compared to new building standards.
13	Slovakia	Slovakia	Introduced in 1998, the national programme supports municipalities in financing social rental housing and related infrastructure. It is managed by the Ministry of Transport of the Slovak Republic and co-financed by the State Housing Development Fund.	The programme supports municipalities in financing social rental housing through subsidies and long-term low-interest loans. It targets low-income households and has created almost 50,000 new social dwellings across Slovakia.
14	Academia (*Colegio de registradores*)	Spain	Housing policy in Spain is regulated by its autonomous communities, with the Basque Country being an example of good practices. Notable local examples include Zaragoza and Vivienda.	In Spain, housing policy is the responsibility of its autonomous communities. Among the 17 existing communities, the Basque Country stands out as an example of good practices, having maintained a consistent and socially focused housing policies over time, without frequent legislative changes. Notable examples at the local level include initiatives in Zaragoza and Vivienda.
15	Academia (Polytechnic University of Valencia)	Spain	A regional strategy to identify potential dwellings in depopulated rural areas that could be reactivated to host new generations or inhabitants.	"Arrel" is an innovative strategy to reactivate housing in depopulated rural areas in the Valencian Community. It aims to address demographic challenges by making use of underutilized housing stock.
16	Housing Development Administration	Türkiye	The Housing Development Administration, with its rapid housing production practices, aims to meet 5-10 per cent of the housing needs of Türkiye.	The programme of the Türkiye Government, managed by the Housing Development Administration, started constructing 1,324,392 housing units across 81 cities and 5,897 construction sites from 2003 to February 2024.
17	Co-housing Ukraine	Ukraine	Preferential state housing programmes of the State Youth Housing Agency	Using state and local budgets, along with international assistance, the State Youth Housing Agency has provided housing for 43,000 families, including large families, internally displaced persons, military personnel and those

	Respondent's affiliation	*Country*	*Reported best practice*	*Further description and/or link for more information*
				in need of better housing conditions.
18	Department of Housing and Urban Development	United States of America	Provides federal tax credits to developers of affordable rental housing, ensuring affordability for at least 15 years, and limited to families earning less than 60 per cent of the median income.	

Implementation of best practices: Challenges, lessons learned and recommendations

72. When asked to identify challenges faced in implementing the best practices for addressing housing affordability problems (see table 1 above), the respondents highlighted the following:

(a) Economic and financial barriers: Housing costs have soared due to inflation, significantly reducing purchasing power and making it particularly challenging for young people to afford deposits for housing loans. The homeless also face long waits for housing, often leading to dissatisfaction.

(b) Construction and legal challenges: Delays in construction timelines arise, compounded by the need to relocate families during projects and the difficulty in securing additional funding for necessary programme enhancements.

(c) Administrative and coordination complexity: Managing applications and verifying eligibility involves intricate coordination with multiple stakeholders, such as banks and notaries. Differing priorities among implementing partners, including government and financial institutions, complicate matters.

(d) Monitoring and evaluation efforts: Developing robust monitoring and evaluation frameworks to assess the impacts of housing subsidies requires significant expertise and resources, including to ensure any adjustment of programmes to meet goals effectively.

(e) Outreach and inclusion challenges: Ensuring that housing subsidies reach those in most need without excluding other vulnerable groups is challenging, especially in areas with limited financial services or information.

(f) Financing and funding issues: The programme must ensure adequate national funds for co-financing municipal investments and comply with the "Do No Significant Harm"[11] principles.

73. Over time, best practices have evolved to focus on key issues such as:

(a) Flexibility in the implementation and adaptability of goals to the household needs;

(b) Mortgage guarantee as a means to support access to the housing market.

74. Drawing from the best practice examples, the following recommendations are proposed to further enhance their successful implementation:

(a) Funding and financial resources: Increase the involvement of local authorities, allocate a higher portion of the national budget, allocate more financial resources for accommodating homeless people, attract more international donors, ensure appropriate levels of available funds and link initiatives to specific funding sources;

[11] "Do No Significant Harm" means not supporting or carrying out economic activities that do significant harm to any environmental objective, where relevant, within the meaning of article 17 of European Union Regulation 2020/852.

(b) Housing accessibility and guarantees: Revise and increase guarantee amounts for families purchasing homes outside the capital region and for energy-efficient dwellings, and develop more instruments to make housing accessible for young people.

(c) Communication and involvement: Improve communication with the population for projects.

(d) Construction methods and housing systems: Accelerate the use of modern offsite industrialized construction methods and focus on cooperative housing construction to counteract the negative impacts of developers on housing affordability and human-centricity.

(e) Legal and procedural improvements: Unify the control of all legal procedures for property transactions to facilitate financing and accessibility.

(f) Permanent initiative and continuous credit line: Implement a project as a permanent initiative with a continuous credit line in cooperation with the donor.

(g) Guidance: Provide clear guidance to meet the "Do No Significant Harm" principle.

75. The following are key recommendations for policymakers from other countries who wish to adapt or replicate the best practices to promote affordable housing:

(a) Prioritize risk assessment and project scale: Policymakers should conduct thorough risk assessments and understand the scale of housing projects to ensure successful implementation. Monitoring overall satisfaction, specifically the satisfaction of families with the space, is a crucial consideration.

(b) Encourage diversity in properties: Selecting properties that encourage diversity is essential for fostering inclusive communities.

(c) Utilize housing guarantee programmes for demographic improvement: Housing guarantee programmes can positively impact demographics by improving affordability and supporting young families to raise more children.

(d) Conduct research and involve key stakeholders: Conducting research on housing needs and involving key stakeholders in the design and implementation process is critical. This includes government agencies, financial institutions, developers, community organizations and potential beneficiaries.

(e) Prioritize equity and accessibility: Ensure that housing initiatives prioritize equity and accessibility by targeting assistance to those most in need, such as low-income households and vulnerable populations.

(f) Monitor and evaluate: Establishing robust monitoring and evaluation mechanisms is crucial for tracking progress and impact over time. Regular assessments help identify areas for improvement and inform policy decisions.

(g) Develop public awareness campaigns: Implementing comprehensive public campaigns and outreach strategies can help inform potential beneficiaries about housing projects, eligibility criteria and the application process.

(h) Integrate energy efficiency: Housing support programmes should integrate energy efficiency components to address climate challenges and achieve synergy effects.

(i) Learn from past lessons: Learning from past experiences, such as ensuring stable budgets, setting optimal subsidy-to-loan ratios, maintaining long-term local visions, and having appropriate legal frameworks is crucial for the sustainability and success of the housing affordability initiatives.

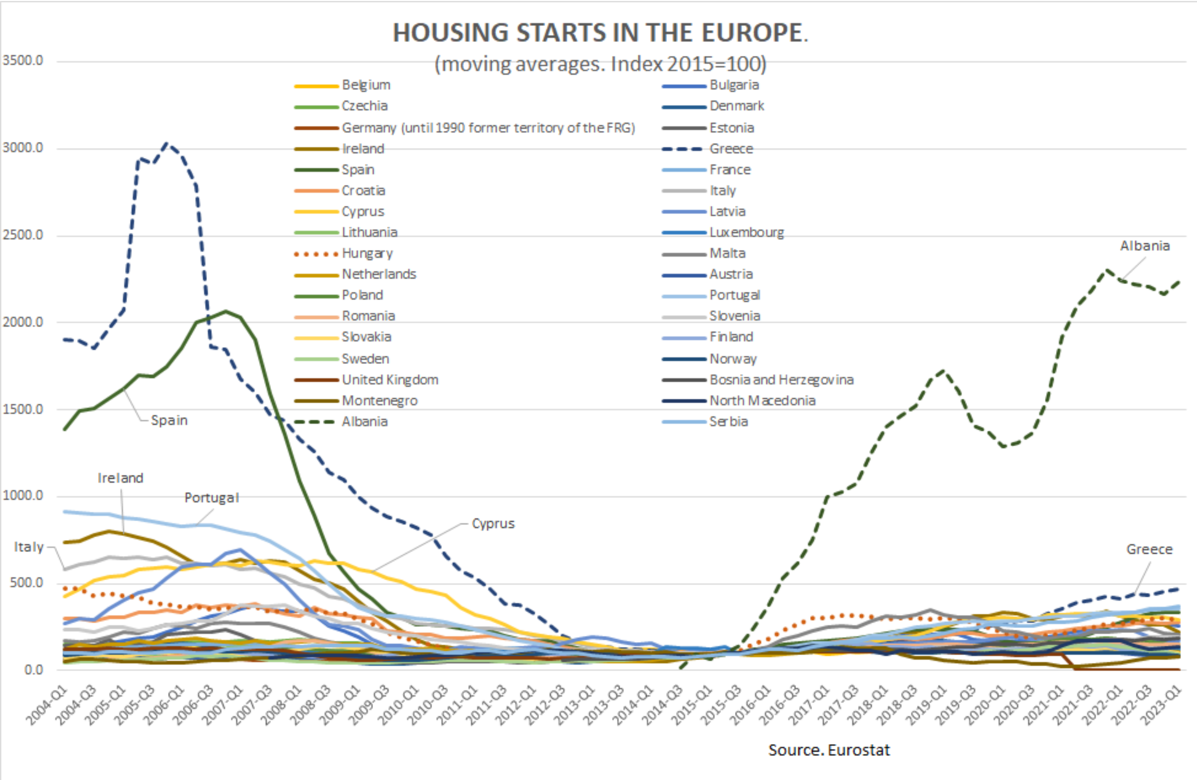
(j) Importance of financing for social housing: Finding financing to subsidize social housing is a critical aspect of housing initiatives.

V. Evidence from some European countries: housing affordability data

76. This section provides a concise summary of affordability ratio estimates for 32 European countries drawing on Eurostat statistical data. Adding that data aims to support the perceptions gathered through the questionnaire and offer detailed insights into affordability conditions, highlighting the urgency for interventions. The data presented includes the evolution of new housing supply, the housing tenancy structure and affordability ratios by country and tenancy. Similar to previous analysis, the examination is conducted from both a static perspective (considering all data as non-periodic) and a dynamic perspective (yearly evolution), allowing for assumptions based on real data information.

77. The perception of a housing shortage is supported by the evolution of new housing building over time. The dynamics shown in figure 3 suggest a significant decline in housebuilding over the past decade in many countries, reinforcing the perception of insufficient housing supply in both social and private markets.

Figure 3



Housing tenancy

78. The type of tenancy varies widely across European countries. The dataset allows us to determine how households access housing and their associated housing costs. In the EU-SILC dataset, tenancy is categorized into four types (five since 2010): (i) owner (distinguished as owners with and without pending payments since 2010); (ii) tenant paying at market price; (iii) tenant paying a reduced price; and (iv) accommodation provided for free.

79. Analysing the dataset across 32 European countries has revealed that the most common form of tenancy is ownership, with a homeownership rate of 65.3 per cent. The rental rate is 29.4 per cent, with 22.1 per cent of households renting at market prices and 7.3 per cent renting at reduced prices or through public housing. Additionally, 5.2 per cent of households benefit from housing provided at no cost, with unspecified reasons for this. This may include support from public services, family members, or other sources. The dataset does not provide specific details about the reasons or type of free housing provided, but the high rate suggests the implementation of significant housing policies or solutions in some countries (see table 3).

Table 3
Housing tenancy average, Europe

Evaluation of 32 countries	Percentage
Homeowner	65.3
Tenant or subtenant paying rent at prevailing or market rate	22.1
Accommodation is rented at a reduced rate (lower than market price)	7.3
Accommodation is provided free	5.2

Source: EU-SILC.

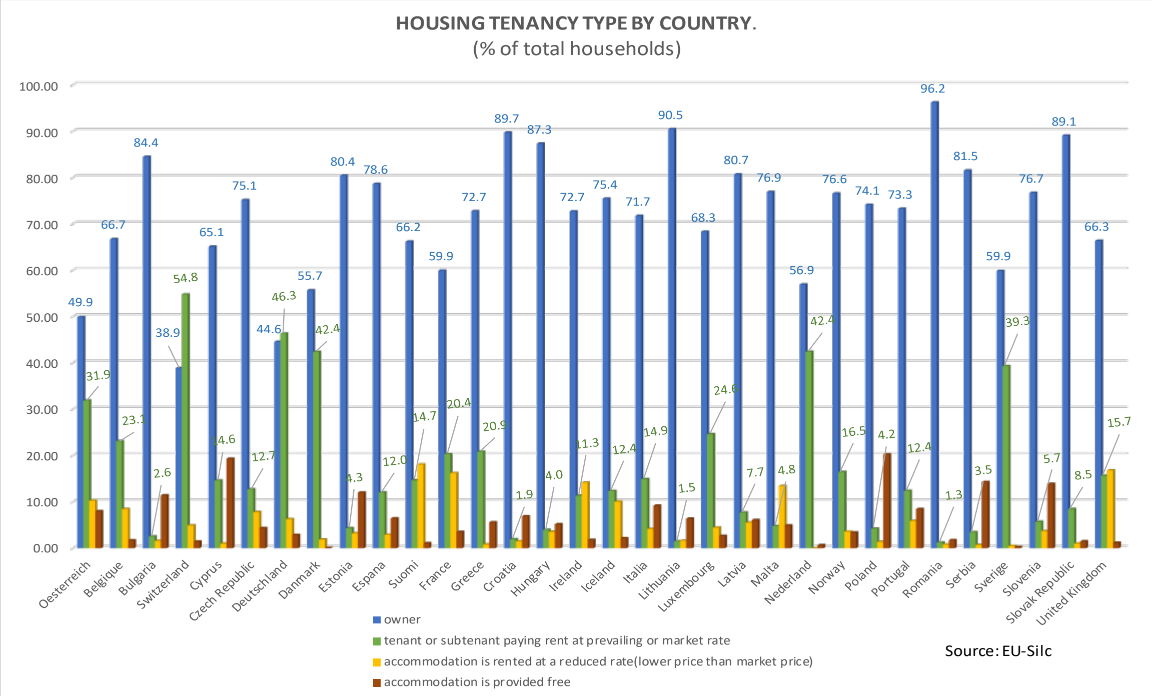
80. The tenancy structure varies significantly by country. Most countries have a homeownership rate above 70 per cent, with only Switzerland and Germany having a higher rental rate than ownership rate. Switzerland has a rental rate of 54.8 per cent and an ownership rate of 38.9 per cent, while Germany has a rental rate of 46.3 per cent and an ownership rate of 44.6 per cent (see figure 3). In the remaining countries, the majority of households own their primary residence. Countries with homeownership rates exceeding 70 per cent include Bulgaria, Czechia, Estonia, Spain, Greece, Croatia, Hungary, Ireland, Iceland, Italy, Lithuania, Latvia, Romania, Serbia and Slovakia. Among these, Central and Eastern European countries typically have homeownership rates of 80 per cent or higher, while Southern European countries have rates close to 70 per cent.

81. The private rental market is concentrated in a few countries. Switzerland has the highest rental rate at 54.8 per cent, followed by Germany at 46.3 per cent, Denmark at 42.4 per cent, the Netherlands at 42.4 per cent, Sweden at 39.3 per cent and Austria at 31.9 per cent. These countries have a majority of households in the private rental market.

82. Reduced-price rentals are often associated with public housing and are significant in other countries. Finland has 18.1 per cent of households in reduced-price rentals, France has 16.2 per cent, the United Kingdom has 16.8 per cent, Ireland has 14.1 per cent and Malta has 13.4 per cent. In all these cases, except France, the share of households in reduced-price rentals exceeds those in the private rental market. This suggests a substantial public rental sector in these countries, indicating a significant capacity to manage housing policy through the control of a large portion of the housing supply. There is no information about low-rent tenants in the Netherlands.

83. The last group consists of households with homes provided for free. This is particularly relevant in some European countries, such as Poland, where 20.3 per cent of households fall into this category, followed by Cyprus (19.3 per cent), Serbia (14.3 per cent), Slovenia (13.9 per cent), Bulgaria (11.4 per cent) and Estonia (12 per cent). This group is also significant in Central and Western European countries, accounting for 6-9 per cent of households in Austria, Spain, Italy, Greece and Portugal. In some cases, this group is more prominent than the reduced-price rental group, suggesting that housing support and policy measures vary substantially across countries.

Figure 4



84. Detailed data by country can be found in table 4. This table shows countries with extreme tenancy distribution, that is, those with higher ownership and lower rental markets structures (both marked in red).

Table 4

Tenancy structure in 32 selected ECE countries, average 2008-2020

(Percentage of total households)

Country	*Owner*	*Tenant or subtenant paying rent at prevailing or market rate*	*Accommodation is rented at a reduced rate (lower than market price)*	*Accommodation is provided free*
Austria	49.9	31.9	10.2	8.0
Belgium	66.7	23.1	8.5	1.7
Bulgaria	84.4	2.6	1.6	11.4
Switzerland	38.9	54.8	4.9	1.4
Cyprus	65.1	14.6	1.0	19.3
Czechia	75.1	12.7	7.8	4.3
Germany	44.6	46.3	6.3	2.9
Denmark	55.7	42.4	1.9	0.1
Estonia	80.4	4.3	3.2	12.0
Spain	78.6	12.0	2.9	6.4
Finland	66.2	14.7	18.1	1.1
France	59.9	20.4	16.2	3.5
Greece	72.7	20.9	0.8	5.6
Croatia	89.7	1.9	1.5	6.9
Hungary	87.3	4.0	3.5	5.2
Ireland	72.7	11.3	14.2	1.8
Iceland	75.4	12.4	10.0	2.2
Italy	71.7	14.9	4.2	9.2
Lithuania	90.5	1.5	1.6	6.4
Luxembourg	68.3	24.6	4.4	2.7

Latvia	80.7	7.7	5.5	6.1
Malta	76.9	4.8	13.4	4.9
Netherlands	56.9	42.4	0.0	0.7
Norway	76.6	16.5	3.6	3.4
Poland	74.1	4.2	1.4	20.3
Portugal	73.3	12.4	5.9	8.5
Romania	96.2	1.3	0.8	1.7
Serbia	81.5	3.5	0.7	14.3
Sweden	59.9	39.3	0.5	0.3
Slovenia	76.7	5.7	3.7	13.9
Slovakia	89.1	8.5	1.0	1.5
United Kingdom	66.3	15.7	16.8	1.2
Average	**65.3**	**22.1**	**7.3**	**5.2**

Source: EU-SILC, Eurostat, 2004-2020.

Tenancy evolution

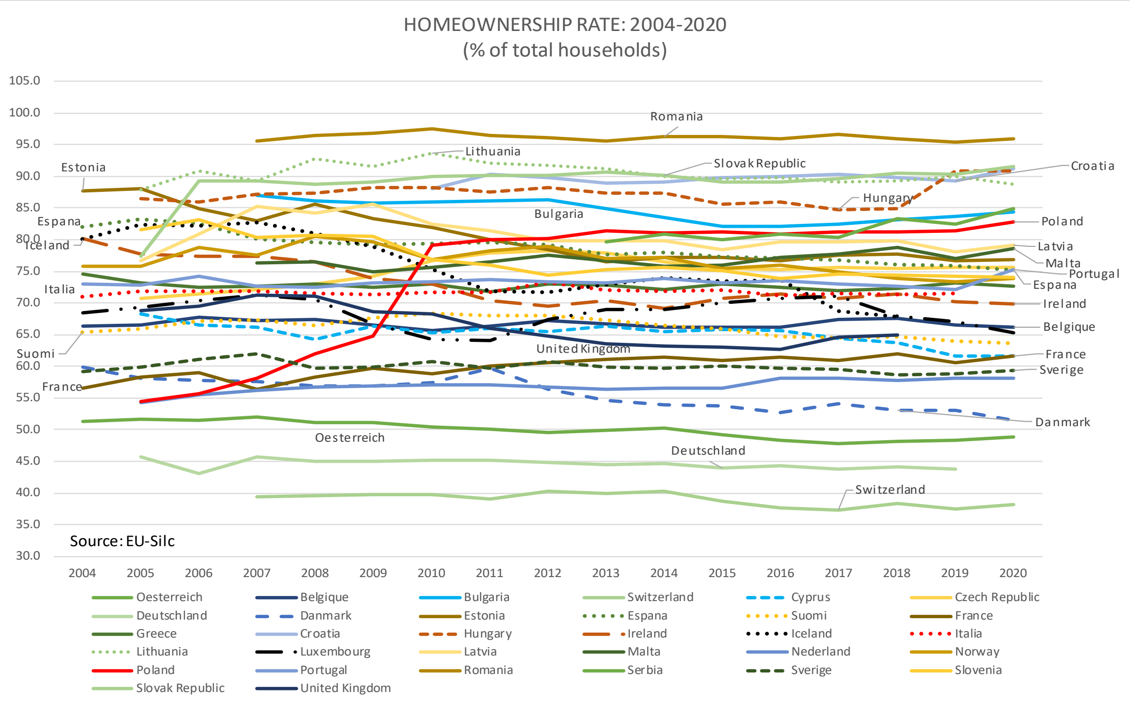
85. It is generally accepted that tenancy structure in a housing market is a long-term feature, as the consolidation or changes in household tenancy mobility depend on various factors. While the evidence is substantial, tenancy (and changes in it) is primarily determined by the household life cycle, the occurrence of shocks affecting the housing market or economy, the progression from renting to ownership, demographic trends, labour market mobility and housing preferences.

86. The stability of housing tenancy patterns has been analysed for each country in the dataset and can be shown in the following figures. For instance, figure 5 represents the tenure rate by year and country among the 32 countries. Generally, the figure clearly shows a quite stable ownership rate over the 14 years analysed, consistent with the idea of a long-term pattern in tenancy. During this period, one significant shock occurred: the global financial crisis, as well as the stabilization process of the Central and Eastern European countries in the dataset. Some changes in ownership rates can be attributed to the GFC shock.

87. Furthermore, since 2006, some of the countries have shown a stable ownership rate (see figure 5). Romania, Lithuania, Slovakia, Croatia and Bulgaria had the highest rates ranging between 85 per cent and 95 per cent. Italy, Portugal, Finland and Belgium had ownership rates of around 65-70 per cent, while Austria, Germany and Switzerland had around or below 50 per cent. In these countries, the 2007 GFC did not significantly affect housing tenancy.

88. In other countries, changes in ownership began either in 2007, triggered by GFC, or in 2018, which seemed to produce a general decline in ownership rates. This trend is observed in countries like Iceland (from 80 per cent to 65 per cent), Ireland (a loss of 10 percentage points from 80 per cent to 70 per cent), Estonia (from 87 per cent to 78 per cent), Spain (from 82 per cent to 76 per cent) and Denmark (from 60 per cent to 54 per cent), among others. The full data is available in table A4.

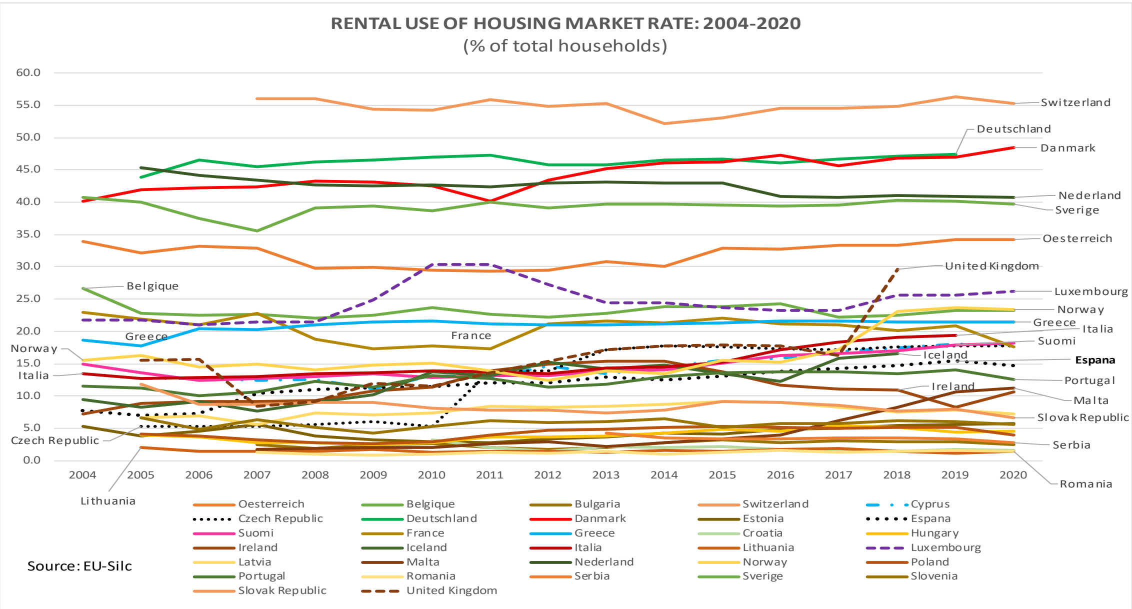
Figure 5



89. A notable evolution after the financial crisis is observed in Poland, where the homeownership rate surged from 55 per cent to 80 per cent during 2008-2009 and continued to grow, reaching 82.9 per cent in 2020. A similar increase can be seen in Slovakia around 2005. Slight recoveries in homeownership rates occurred after 2008 in several countries, including Hungary, Portugal, Latvia and Malta, although these changes were limited.

90. Changes in ownership rates are reflected in the private rental market. Figure 6 represents the long-term perspective on rent ratios, supporting the observations made earlier in this section.

Figure 6



91. Figure 6 shows the strong stability in tenancy for most countries over the last few decades, suggesting equilibrium in the rental market size. Switzerland (around 55 per cent), Germany (46 per cent) and the Netherlands (40 per cent) exhibited stable rental usage of their housing stock. However, some countries have experienced changes in rental usage due to shifts in tenancy. For instance, Luxembourg experienced a falling cycle in ownership rate (in 2008-2011), which led to a significant increase in rent rates during the same period and again since 2017. In Spain, rent rates were around 8 per cent in 2007 and

have since increased reaching 15 per cent in 2020. The United Kingdom saw a decrease in the rent rate by about seven points until 2007 but this was followed by increases reaching 30 per cent per cent in 2020. Finland experienced a similar pattern, with rent rates significantly increasing since 2010. Italy, Norway, Denmark and Malta have all seen continuous increases in rent rates in recent years. These cases indicate that former homeowners may have moved to the rental market, possibly due to the financial crisis. France, on the other hand, followed a different pattern, with a reduction in the rental rate during the initial GFC period (2008-2010), coinciding with a rising period of homeownership.

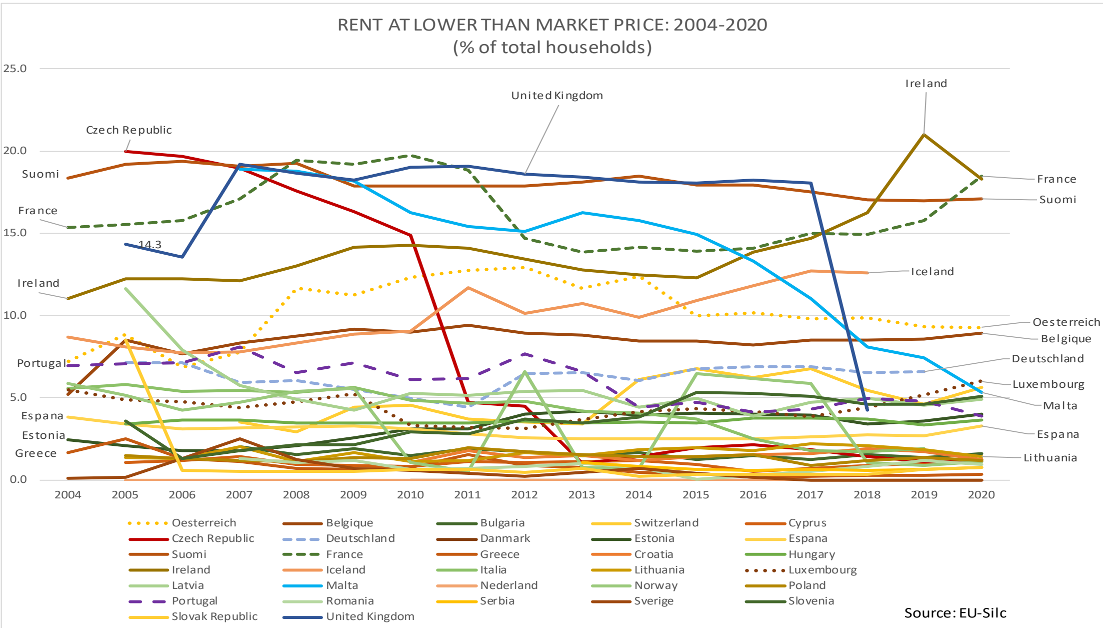
92. The rate of renting at lower prices has generally been less stable. Several countries have experienced substantial changes in these rates for various reasons, often resulting in fewer households enjoying lower-cost housing. Figure 6[12] visually illustrates these changes. The tenancy representation for each country shows that:

(a) There is substantial volatility in this type of tenure. The rates in this type of tenancy change more frequently compared to ownership or market rent. This suggests that households could find affordable housing at times and lose it when conditions change.

(b) The most notable changes have occurred in countries where this tenancy is significant, covering around 10-20 per cent of households. Relevant countries include Czechia, France, Finland, the United Kingdom, Austria, Malta and Iceland. In some of these countries, the rent rate has decreased over the period (e.g., in Malta from 19 per cent to 5 per cent and in the Czech Republic from 20 per cent to 3 per cent), indicating restructuring in the housing market. In other cases, the rate has increased, suggesting more availability of lower-priced units for households. This is evident in France (from 15 per cent to 18 per cent), Ireland (from 11 per cent to 18.3 per cent), Iceland (from 9 per cent to 14 per cent) and Portugal. Any change would suggest that the housing supply in this category fluctuates. More information, which, however, is not available in this dataset, would be needed to understand this sector fully.

(c) The majority of countries are in the lower range of figure 7, with relatively low rates between 1 per cent and 4 per cent of households living in rental homes at lower prices. Although somewhat indistinguishable, the rates in some countries have grown following the financial crisis, suggesting that this type of tenancy substantially assists households facing difficulties when economic conditions change.

Figure 7

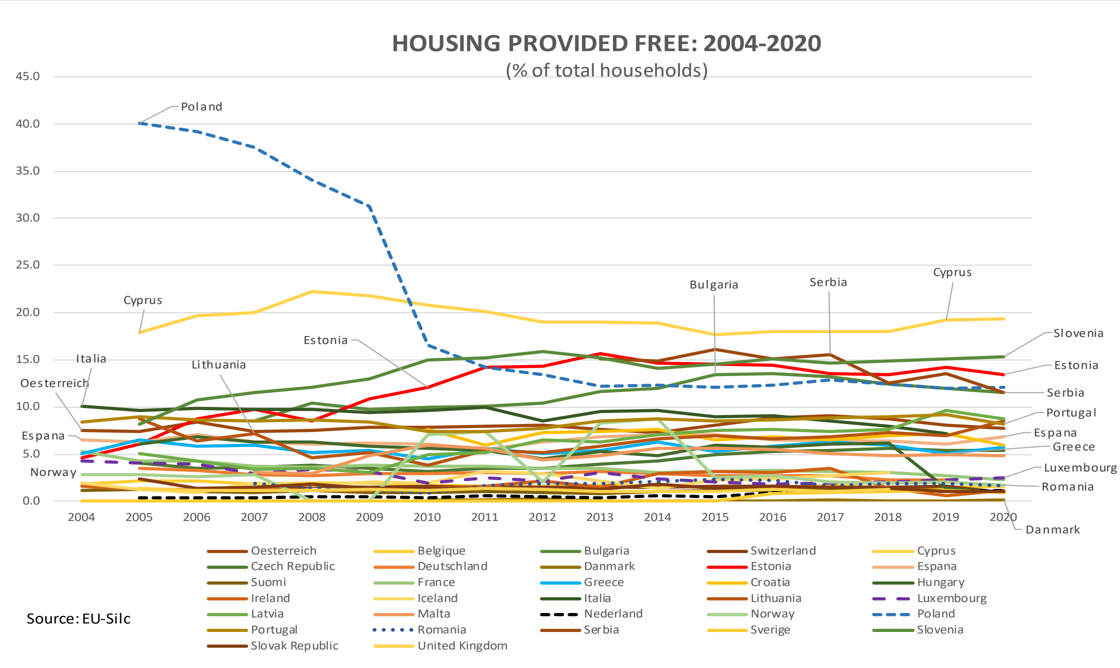


93. Finally, one of the least known groups is households with housing provided for free. Figure 8 illustrates the dynamics of this group within the dataset. This group implies that the household occupying the dwelling does not have to pay any housing costs. However, the dataset is unclear for some countries

[12] Denmark has no observations in this category

where households in this category report occasional payments, but these are not consistent. Despite this, the majority of countries record zero payments associated with this tenure.

Figure 8



94. The evolution of this rate in Poland clearly explains the transformation in its housing market, as reflected in the ownership structure. Figure 7 suggests that units previously provided for free became owned by their residents, with this change affecting around 28 per cent of households in just five years. This transformation indicates a significant shift in the housing market. In contrast, other countries in the Eastern region have experienced different trends: a reduced rate of free-cost housing in Lithuania and an increased rate in Estonia and Slovenia. Analysing the housing market transformation processes in these regions would be very useful for understanding the current market reactions.

95. Aside from these specific cases, the general trend in the rest of the market shows a slight increase in free-cost housing since 2012. This trend reflects the situation in the rental market over the last decade and highlights the ongoing housing needs.

Affordability ratios

96. This section presents the two defined ratios to measure the lack of housing affordability. On average, across the 32 countries (see table 5), these ratios indicate that housing affordability problems are concentrated among low-income households. The Housing Stress (HS) ratio is larger than 30 per cent on average for the 32 countries, while poor households exhibit ratios above 40 per cent. These aggregated data suggest that the fundamental issue underlying the lack of housing affordability is reduced income.

Table 5
Ratios to measure affordability

	All households		*Households under poverty line***			
	Average ratio		*No*		*yes*	
	Mean	Median	Mean	Median	Mean	Median
Housing Cost/Household income	25.67	21.45	21.66	19.46	42.85	35.81
HS_30/40 Housing Stress Ratio	34.67	29.64	28.39	26.29	44.02	36.89

Source: EU-SILC, Eurostat, 2004-2020.

97. The calculated ratios per country reveal significant heterogeneity, as shown in table 6.

Table 6
Affordability ratios by country in 2020
(Percentage)

	All households		*Households under poverty line***
	Housing costs/household income	*Housing stress*	*Housing costs/household income*
Austria	21.45	30.59	40.6
Belgium	24.29	34.66	50.9
Bulgaria	20.06	33.49	55.4
Switzerland	26.63	38.00	22.0
Cyprus	22.28	28.44	48.6
Czechia	15.21	20.29	33.7
Germany	21.93	29.10	44.4
Denmark	30.60	37.77	33.4
Estonia	27.14	44.63	60.0
Spain	25.10	39.91	46.2
Finland	25.20	36.50	19.5
France	23.93	31.69	59.1
Greece	28.12	41.74	53.8
Croatia	20.22	26.87	35.5
Hungary	19.16	31.16	40.1
Ireland	19.38	24.25	36.8
Iceland	51.58	49.14	68.8
Italy	26.23	40.69	65.1
Lithuania	13.86	23.61	37.3
Luxembourg	62.02	55.15	96.0
Latvia	13.23	18.40	57.1
Malta	17.48	24.71	42.2
Netherlands	30.54	38.22	26.2
Norway	27.37	37.36	38.4
Poland	20.76	33.16	23.5
Portugal	19.17	28.66	33.2
Romania	19.90	29.85	84.8
Serbia	22.96	37.35	87.7
Sweden	24.90	37.40	35.9
Slovenia	17.14	23.31	35.6
Slovak Republic	18.14	25.43	30.8
United Kingdom	28.18	43.75	42.2

Source. Own calculations based on EU-Silc microdataset, Eurostat.

*For Iceland and United Kingdom, the ratios are for 2018 and for Italy and Germany, the ratios are for 2019.

** Housing Stress ratios are the same for households under the poverty line. Romania and Serbia ratios under the poverty line correspond to 2019.

98. Extracting the information by type of tenancy, the results shown in table 7 are consistent with table 6, indicating a concentration of housing costs relative to income among tenants paying market (28.01 per cent, five points higher than other categories). The Housing Stress results emphasize that housing cost problems are concentrated among households in the lower 40 per cent of the income distribution, affecting

both homeowners and market-rate tenants (37.3 per cent and 36.1 per cent, respectively), with a more pronounced impact on the latter.

Table 7
Cost to income ratio by tenure type
(Percentage)

	Housing Cost/Household Income	*HS_30/40 Housing Stress Ratio*	
	Mean	*Mean*	*Median*
Owner	22.31	37.33	30.45
Tenant or subtenant paying rent at prevailing or market rate	28.01	36.07	30.81
Accommodation is rented at a reduced rate (lower price than market price)	23.95	29.82	26.04

Source: EU-SILC, Eurostat, 2004–2020 and own estimations.

99. The structure of affordability ratios by household type indicates that affordability problems are concentrated among households with incomes in the lower 40 per cent across almost all household typologies. The HS ratio averages around 35 per cent across the entire dataset and exceeds 40 per cent for poor households (see table 8). The two groups facing the most significant affordability problems are one-person households and single parents with children. For one-person households, the HS ratio reaches 35.2 per cent overall and exceeds 48 per cent for poor households. For single parents with children, the HS ratio is 34.4 per cent for those with incomes in the lower 40 per cent of the income distribution, and nearly 40 per cent for those below the poverty line. In general, affordability problems affect almost all types of households living below the poverty line.

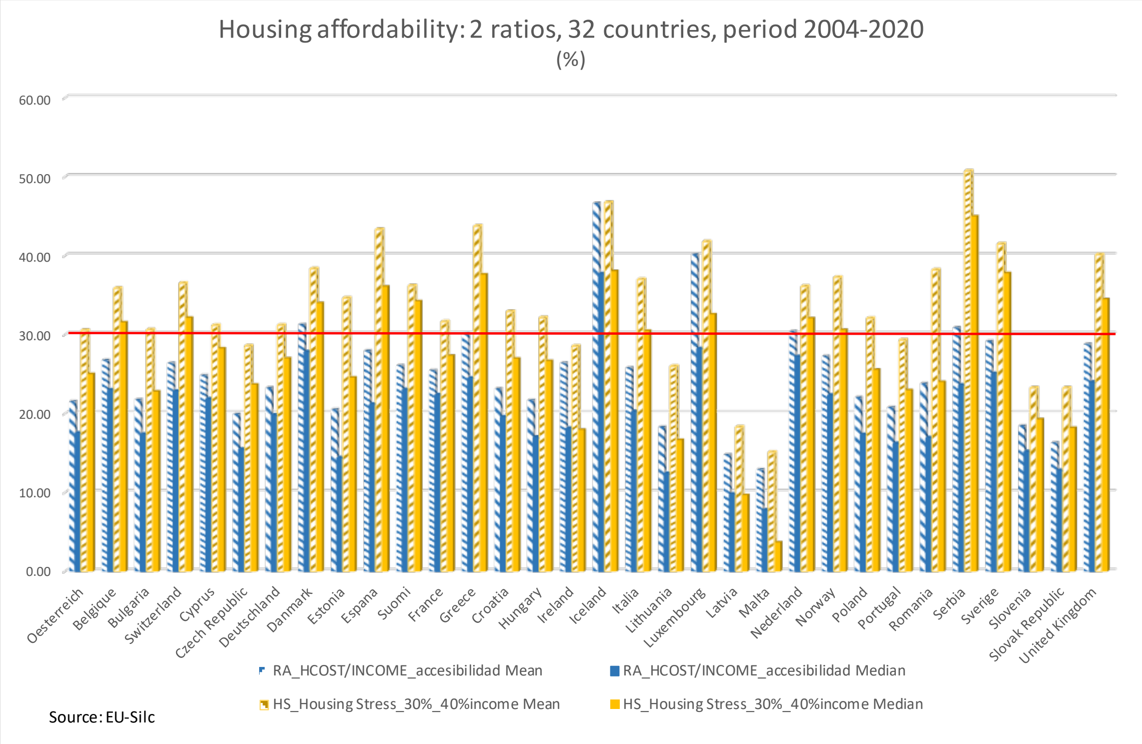
Table 8
Housing affordability ratios (average for 32 countries)

	All households		*Households under poverty line*	
	Housing Cost/Household income	*30/40 Housing Stress*	*-Housing Cost/Household income*	*30/40 - Housing Stress*
Average	25.67	34.67	42,85	44,02
one person household	31.72	35.13	48.13	48.13
2 adults no dependent children, both adults under 65 years	22.03	34.82	44.44	44.44
2 adults, no dependent children, at least one adult 65 years or more	20.74	26.37	34.69	34.69
Single-parent household, one or more dependent children	29.53	34.42	39.83	40.32
2 adults with dependent children	21.67	35.99	35.81	38.28
Other households with dependent children	17.83	36.23	33.46	37.73

Source: EU-SILC, Eurostat, 2004-2020 and own estimations.

100. The country analysis of both ratios reveals significant differences in housing affordability problems across Europe. Figure 9 estimates the Affordability Ratio (RA) and Housing Stress ratio by country, highlighting these disparities within the European region. The data indicates that some countries experience much higher levels of housing stress and affordability issues compared to others, underscoring the varied impact of housing costs on households across different national contexts.

Figure 9



101. The 30 per cent rule highlights severe housing affordability issues in some countries, both in the RA and HS ratios. The RA mean is slightly above 30 per cent in Denmark, the Netherlands and Serbia, but it reaches 40 per cent or more in Iceland and Luxembourg. This average is calculated for the entire period and the fact that it exceeds 40 per cent indicates significant difficulties in covering housing costs.

102. Regarding HS, a larger number of countries exceed the 30 per cent rule. Seven countries have an RA greater than 40 per cent (Spain, Greece, Iceland, Luxembourg, Serbia, Sweden and the United Kingdom), while others show an RA of around 35 per cent. Eight countries exhibit an HS lower than 30 per cent (Czechia, Ireland, Lithuania, Latvia, Malta, Portugal, Slovenia and Slovakia), suggesting a relatively better situation for lower-income households in covering housing costs.

103. Housing affordability is a cyclical mechanism that changes depending on market conditions. The averages provided in previous tables vary during the analysed period. Figure 10 contains the values of RA and HS ratios in three selected years from the analysed period: 2006 (before the impact of the financial crisis), 2011 (after the first wave of the financial crisis) and 2020 (the pandemic year). The ratios vary in all cases and in different directions.

104. For instance, Ireland showed a particularly high RA in 2011, indicating severe difficulties for households (on average) to cover housing costs (RA is 55 per cent), possibly due to a fall in income. Similarly, Iceland saw its RA grow significantly in the same year. However, Luxembourg maintained an RA lower than 30 per cent during 2006 and 2011 but more than doubled to 62 per cent in 2020.

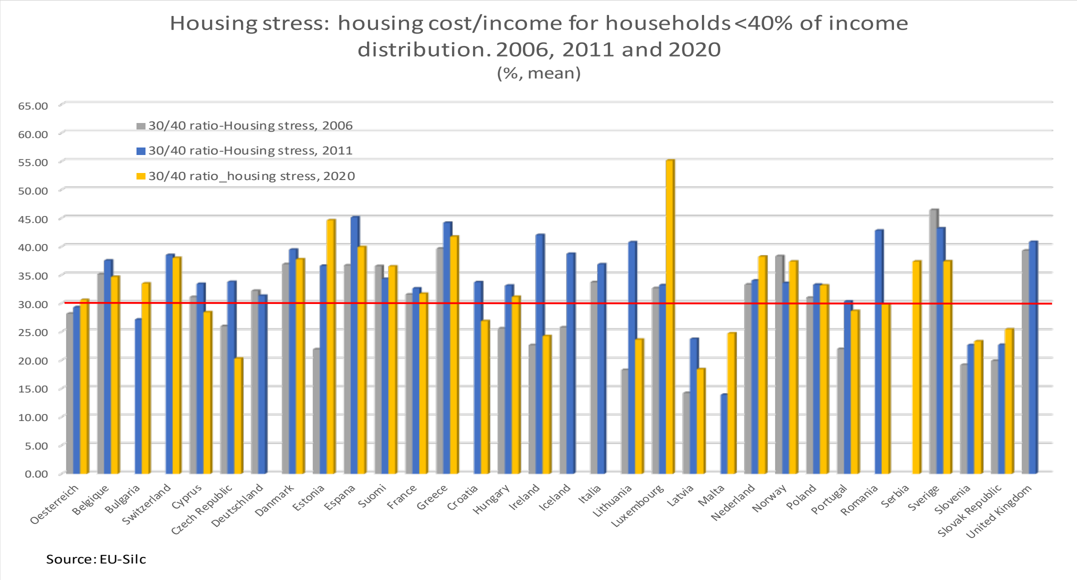
105. Most countries saw their RA decrease in 2020 relative to previous years, although some experienced an increase, reflecting rising affordability problems during recent years. These countries include Austria, Bulgaria, Estonia, Finland, Luxembourg, Malta, the Netherlands, Norway and Slovakia.

106. Finally, some countries experienced severe affordability issues in the first of the observed years (2006) but saw improvements (ratio values decreased) over the rest of the decade. These countries include Spain, Finland, Norway, Sweden and the United Kingdom.

Figure 10

107. In 2011, Ireland experienced a significant impact on the HS ratio, which was also seen across many other countries in the region, reflecting the initial wave of financial repercussions (see figure 11). Notable rises in HS ratio were observed in Spain (45 per cent), Greece (44 per cent), Ireland (42 per cent), Lithuania (40 per cent), Romania (42.8 per cent), Sweden (44 per cent, although down from 45 per cent in 2006) and the United Kingdom (40 per cent). Figure 10 shows an escalation of the 2020 ratio in certain countries, signifying a notable surge in housing cost payments relative to income, particularly for low-income households. The countries experiencing increased housing stress in 2020 include Bulgaria, Estonia, Luxembourg, the Netherlands and Norway, while in other countries, the situation has improved.

Figure 11



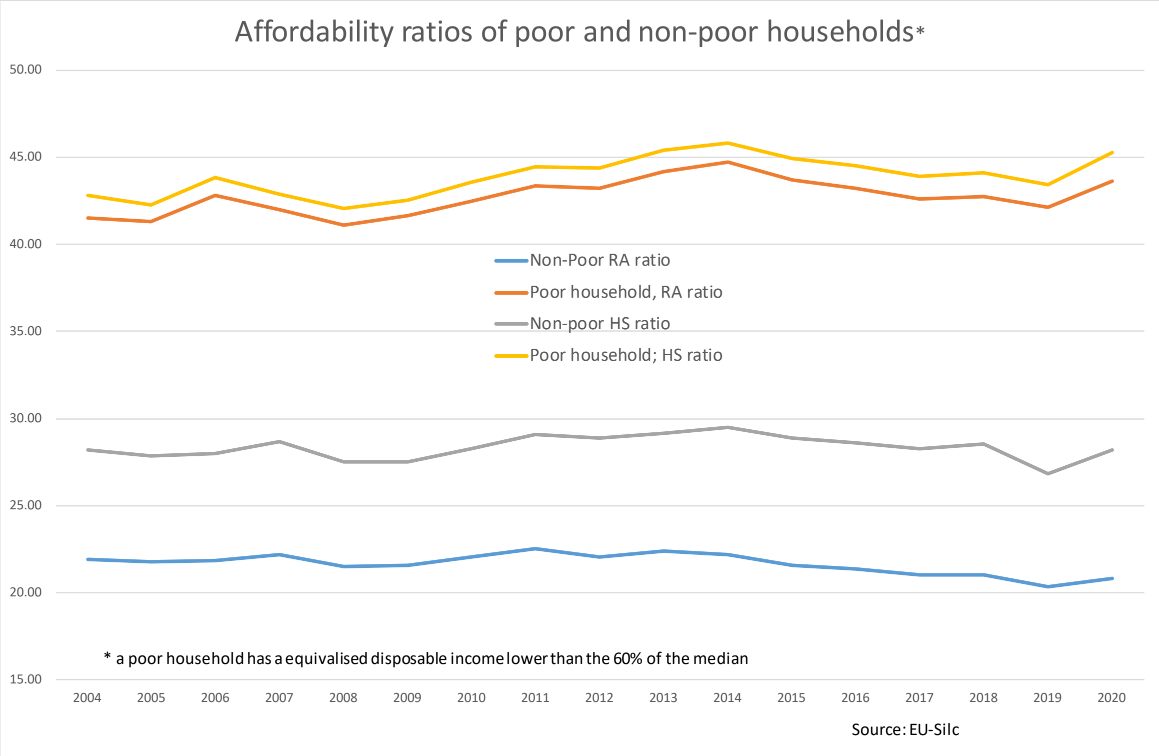
108. The distribution of the HS ratio as shown in figure 10 implies that the severity of housing affordability issues varies significantly among countries. Some countries have low rates, supporting the notion that housing unaffordability is a localized problem. Such countries include Cyprus, Czechia (excluding 2011), Latvia, Malta, Slovenia and Slovakia. In essence, low-income households experience greater volatility in their ability to afford housing expenses relative to their income. This makes housing accessibility more challenging and increases their vulnerability in housing situations.

Housing affordability and poverty by country and time

109. Figure 11 supports the interpretations made above, showing the dynamic evolution of ratios (calculated as the average of all countries during the entire period) when households are divided into two groups: non-poor and poor households. Non-poor households enjoy ratios (both RA and HS) lower than 30 per cent. On the contrary, poor households reflect high ratios (both RA and HS) between 40 per cent to 45 per cent throughout the entire period. The difference of almost 20 percentage points suggests different conditions related to housing that should be analysed further.

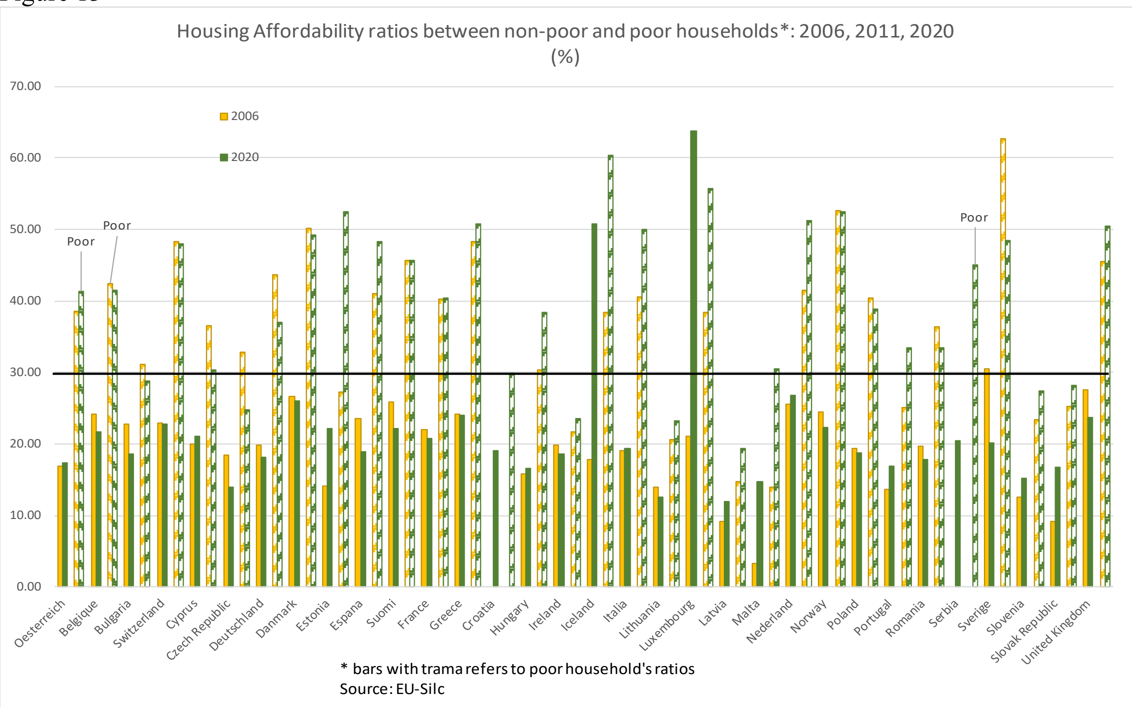
110. As figure 12 suggests, affordable conditions remained almost unchanged for non-poor households throughout the entire period, while they increased by almost three points for poor households between 2011 and 2016. The asymmetric effects on the affordability ratios from the economic shocks during those years support the idea of greater housing vulnerability for poor households due to general economic changes.

Figure 12



111. The data by country supports this result. When examining the years 2006 and 2020, the estimated ratios show larger deviations from the 30 per cent threshold in the HS ratio, as illustrated in figure 13. This highlights the concentration of severe affordability problems in most countries. In these countries, poor households face housing costs that exceed 45 per cent of their income. Some countries, such as Iceland, Luxembourg and Sweden, exhibit even more severe situations reaching around 60 per cent of household income.

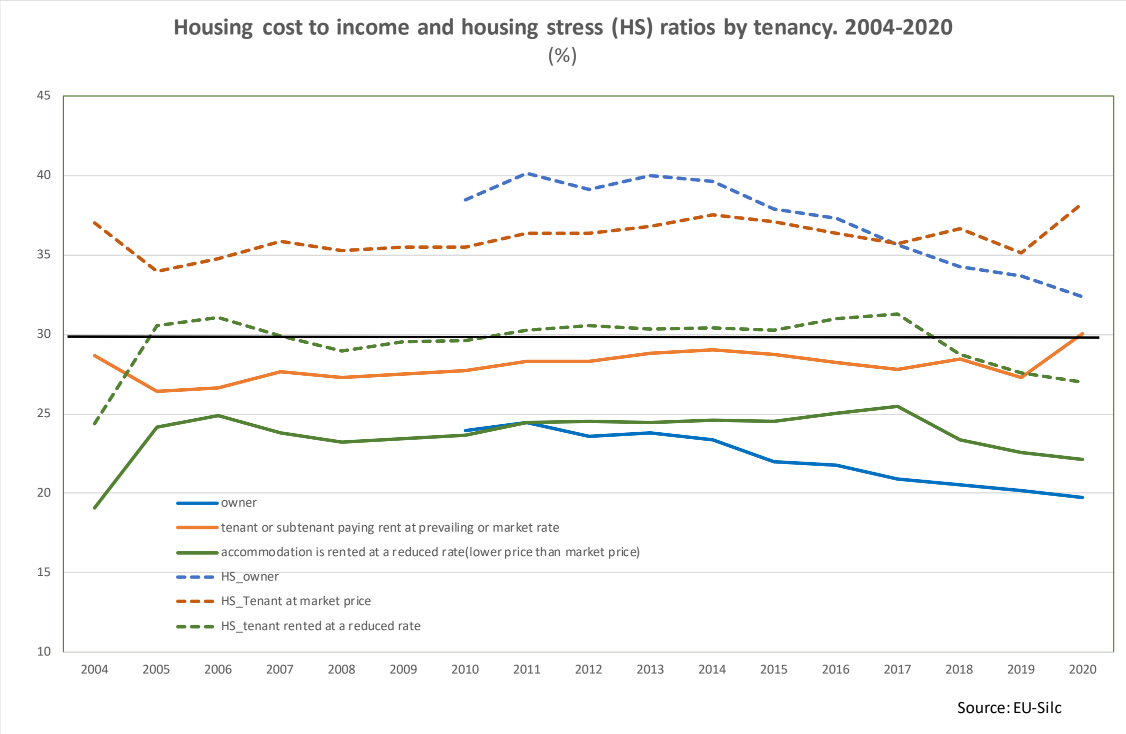
Figure 13



By tenancy and year

112. These volatile effects likely influenced changes in tenancy structures. Figure 14 presents the two ratios segmented by tenancy type, focusing on three main groups: owners[13], tenants paying market rent, and tenants paying below market rent. The evolution of ratio pairs (such as RA and HS for ownership) appears quite similar, indicating consistent trends within each tenancy type over time.

Figure 14



113. For tenants paying market rent and reduced rent prices, both the RA and HS ratios increased during the last decade until 2017-18. Since 2018, tenants paying market prices have seen a renewed increase in these ratios, while tenants paying below market rent have benefited from better conditions, with a reduction in these ratios. The HS ratio for tenants paying below market prices hovers around 30 per cent, indicating that this type of tenancy improves affordability for households.

114. Conversely, the ownership rate has significantly decreased during the observed period, dropping from 24 per cent to 19.7 per cent, suggesting improved affordability for becoming an owner. This likely reflects the fall in mortgage interest rates, as the numerator of the ratio includes total repayment plus interest paid annually. The HS ratio for owners has also declined, starting from a high of 40 per cent and decreasing to 32 per cent since 2013. These trends suggest that homeownership offers better affordability for households, provided they can secure a mortgage to buy a house.

By countries, tenancy type and time[14]

115. Consistent with the information provided, the RA by country is distributed below the 30 per cent threshold in most countries. The stability of these ratios, generally around low levels, suggests that affordability for homeowners is not an issue, with a few exceptions related to changes in tenancy, as indicated in figure 15.

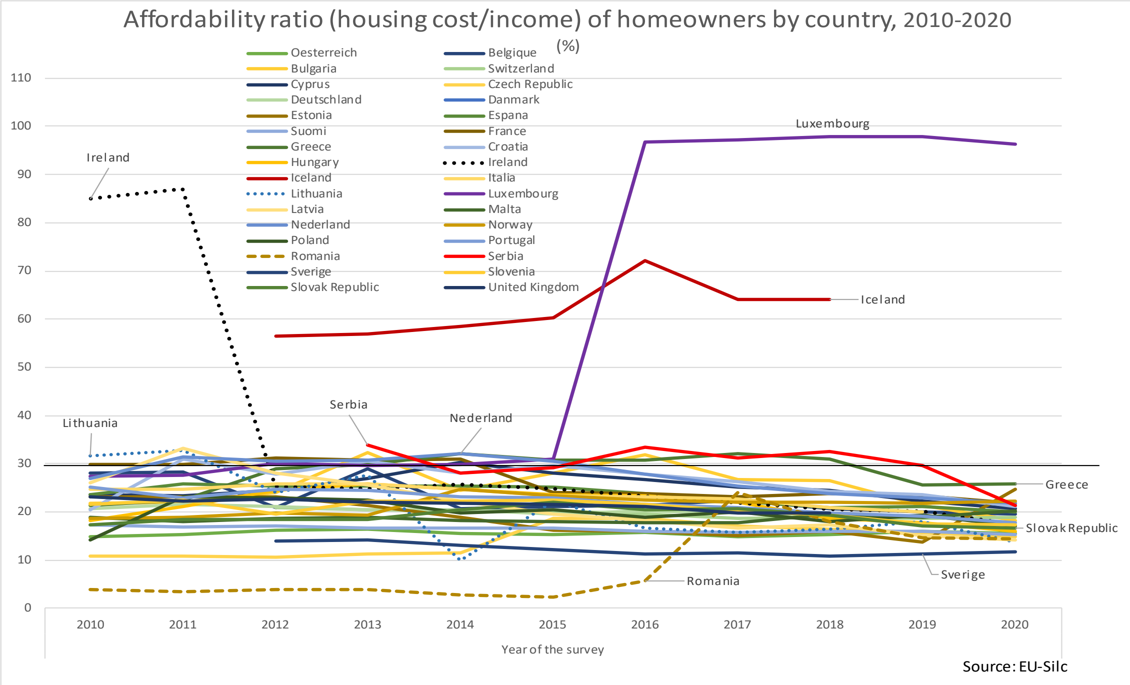
116. Firstly, the three countries do not fit the stability perception. Ireland dramatically reduced RA during the early years (2010-2012) as a reflection of economic stabilization. Secondly, Iceland maintains high RAs for homeowners, ranging between 56 per cent and 64 per cent, indicating severe problems in meeting

[13] The dataset does not have complete information to estimate the ratios for homeowners, as data on mortgage repayment and interest rates paid are only available from 2010 onwards.

[14] This section includes figures that may be difficult to follow. Each figure differentiates the countries using dashed lines, colours, etc., to make it easier to follow the explanation. It is important to visually represent the dynamics to quickly identify the most challenging situations. The data corresponding to the figures in this section can be found in Table A6.

housing costs for this group. Thirdly, Luxembourg experienced a sharp rise in RA, reaching 100 per cent, suggesting that maintaining homeownership (if still paying a mortgage) imposes extreme consumption restrictions on households.

Figure 15



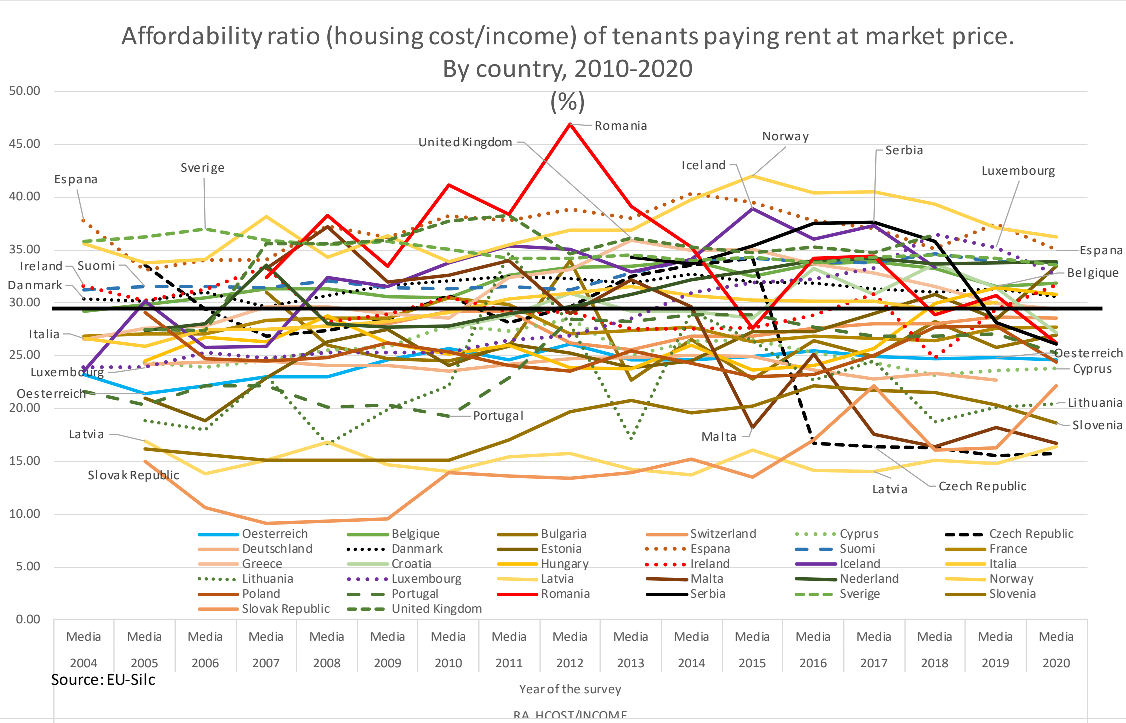
117. In some countries, homeowners have an RA exceeding the 30 per cent threshold. These countries include Serbia, the Netherlands, Greece (only from 2013-2018) and, occasionally, Bulgaria and Lithuania. The rest of the countries demonstrated substantial affordability in this tenancy type. Notably, Romania has seen an increase in RA by around 10 percentage points (still below 20 per cent) during the period.

118. Tenants paying market prices exhibit the worst affordability conditions, as shown in the aggregate ratios. Figure 16 includes the RA ratios for various countries over the entire period, and the representation aligns with the previously tested volatility, indicating that affordability for tenants can rapidly shift from affordable to non-affordable. In most countries, the ratio fluctuates within a consistent range, while others reflect significant affordability challenges faced by households over this decade.

119. Several countries have tenants paying market rent with notably high RA ratios. Those with larger RAs include Spain, Sweden, Finland, the United Kingdom, Romania, Iceland, Norway, Serbia, Denmark, Malta, Ireland (until 2017), Luxembourg and Belgium. Some countries initially had better positions but saw ratios exceed 30 per cent, indicating increased housing unaffordability: the Netherlands, the United Kingdom, Italy (since 2014), France, Luxembourg (moving above 30 per cent in 2013) and Greece.

120. Conversely, some countries have RA ratios below 30 per cent that, despite experiencing volatility, have not risen above this threshold. For example, Portugal has seen increasing ratios since 2012 but remains at 30 per cent, while Austria maintains an RA of around 24 per cent. Most other countries in this category are in Central and Eastern Europe, including Lithuania, Slovenia, Czechia, Latvia and Slovakia, as well as Malta and Cyprus.

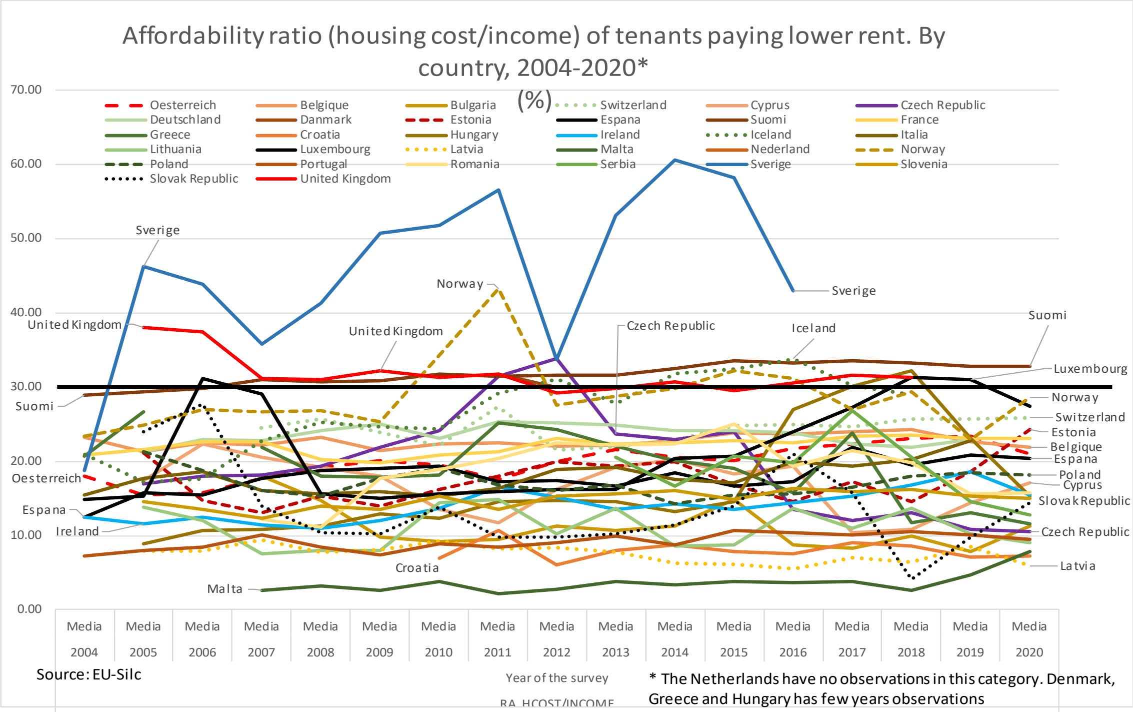
Figure 16



121. Figure 17 shows the RA for tenants paying below market price. As expected, most countries reflect high affordability throughout the entire period. Only a few countries show high ratios. These include Sweden, with ratios between 40 per cent to 60 per cent and high volatility; the United Kingdom, with initial ratios close to 40 per cent but reducing to around 30 per cent over the period; Finland, with a stable ratio of around 35 per cent that has been growing during the observed decade; and Norway and Iceland, with RAs occasionally surpassing 30 per cent. The rest of the countries have RAs distributed between 3-7 per cent (Malta) and up to around 26 per cent (Germany). Luxembourg also shows a volatile ratio, fluctuating from 18 per cent to 32 per cent but decreasing over the period, indicating that this may be a housing measure to facilitate affordable housing in a market with strong constraints, as observed previously.

122. The HS ratio exhibits a similar evolution to RA, with a larger number of countries situated above 30 per cent. The classification and explanation of the corresponding figures would be repetitive, hence they are not included in this report, although they are available upon request.

Figure 17



123. The scope and effects of affordability issues vary significantly across countries. “Western European” countries, in particular, are experiencing larger cost-to-income ratios for tenants due to strong pressures on the rental market. This issue may not have been adequately identified in the questionnaire responses, likely due to the geographical distribution of the respondents.

VI. Conclusions

124. The survey and subsequent study reveal a widespread recognition of the housing affordability crisis in the ECE region, driven by tenancy imbalances, supply shortages, regulatory constraints and economic factors like income disparity and rising costs. The survey, which predominantly involved respondents from public organizations, highlighted a strong focus on housing policy, legislation and regulation, urban planning, and social housing management as means to combat the housing problem. The need for robust monitoring through market observation and public statistics was also emphasized.

125. Key challenges include limited rental markets in some countries, supply-demand imbalances and high economic costs, with major cities and urban areas being most affected by housing unaffordability. Primary drivers of unaffordability are high demand, increasing prices, income growth that lags behind inflation and housing stock shortages, leading to market distortions such as illegal occupation and high commuting costs.

126. Tools such as legislation, policies, strategies, and national/local projects are being mobilized to tackle these housing affordability issues. Related best practices provided focused on housing finance, land availability, governance and sustainability. Implementation challenges cited include financial barriers, construction delays, administrative complexity and financing issues.

127. The document also identifies the housing affordability situation in 32 European countries by estimating two key ratios: the housing cost to income ratio (RA) and the 30 per cent/40 per cent ratio (HS). These ratios classify countries based on their housing affordability issues, distinguishing between those with minimal problems and those facing significant challenges in maintaining housing stability. The data is segmented by poverty, household type, tenancy type, country and time, offering a detailed view of affordability conditions and allowing for nuanced insights into the dynamics of housing affordability across different contexts.

128. The analysis reveals that homeownership affordability is generally stable and low in most countries. However, households in the rental market, especially those paying market prices, face high volatility in affordability, making them particularly vulnerable to market fluctuations. In contrast, households renting below market prices and those that own homes typically experience better affordability conditions.

129. Based on lessons learned, to improve housing affordability and ensure sustainable and inclusive housing for all in the ECE region, it is recommended that policymakers enhance monitoring and data collection, reform policies and regulations, increase financial support for those most in need, foster collaboration between relevant agencies, prioritize equity and inclusion and integrate sustainability into housing solutions. Additionally, they should ensure sufficient construction in the affordable housing segment and simultaneously develop supporting infrastructure such as schools and transportation.

130. The next step of this report will be to empirically identify the associations between the ratios and household, housing, tenancy and other characteristics. This will help uncover potential reasons, beyond income, that explain the evolution of affordability ratios in the 32 countries.

Annex

Summary of best practices based on responses to the survey

1. In Canada, particularly in Quebec, a major investment in new affordable housing development and the use of modern offsite industrialized construction techniques are highlighted as best practices. You can find more detailed information at www.cmhc-schl.gc.ca. However, there are challenges such as time constraints and financial limitations, exacerbated by post-COVID-19 recovery, inflation and a shortage of construction workers. To enhance success, it is recommended to accelerate the use of modern offsite industrialized construction, focusing on increased investment and technological advancements.

2. In Croatia, the Ministry of Physical Planning, Construction and State Assets is focused on providing housing assistance to young families through various support programmes. These include the Stimulated Social Housing Programme, which has built nearly 9,000 apartments; the subsidisation of housing loans for young people, benefiting over 34,000 families; and the Intersectoral Cooperation Programme offering favourable rental conditions in assisted areas. In 2021, the sixth call for subsidised housing loan applications received 4,739 submissions, with 4,599 approved. The average loan amount was EUR 75,000, with a 22-year repayment period and an average interest rate of 2.17 per cent. The programme aims to promote demographic growth and urban regeneration and reduce youth emigration, offering subsidies that cover from 30 per cent to 51 per cent of loan amounts, based on location development indices. Since 2017, approximately HRK 430 million (around EUR 57 million) in subsidies have been approved. The yearly applications and approvals have consistently increased, demonstrating the programme's growing impact and reach. Major challenges include rising housing market prices and the impact of inflation on purchasing power. Fourteen banks participated in the programme, offering interest rates between 2.09 per cent and 3.50 per cent. Eligibility was open to citizens under age 45 without an apartment or house, for properties costing up to EUR 1,500 per square metre or loans up to EUR 100,000, with repayment periods of at least 15 years.

3. In Estonia, the Tallinn Property Department offers a state-regulated guarantee for bank loans to help young people purchase homes. This assistance is provided to those who often lack the necessary funds for housing loan deposits, making homeownership more accessible. The programme could be improved by introducing more instruments to further enhance accessibility for young people. It is recommended that the system remain simple and easy to understand and ensure that it is user-friendly, effectively meeting the needs of its target demographic.

4. In France, a Paris-based international consultant on architecture and urban development highlights cooperative housing construction as a best practice. A specific example involves a city block in the suburbs of Paris, where a group of friends (11 families) initiated a project using personal savings and a low-cost loan to create housing for ownership and rental. This approach resulted in housing costs being approximately three to four times lower than purchasing ready-made homes, and fostered a strong sense of community. However, the construction period was longer compared to conventional methods. The cooperative model's sustainability is supported by the collective problem-solving approach, where any issue faced by one household is addressed jointly by all cooperative members. The practice suggests that the role of developers, often a factor in unaffordable housing prices and loss of human-centric design, may diminish. Therefore, improving the cooperative housing construction system could be a significant focus, particularly in mid-sized cities, towns and settlements.

5. In Tbilisi, Georgia, the City Hall is involved in two significant projects: "Unfinished Constructions" and "Accommodate Homeless Families." The first project helps individuals who were deceived by construction companies. It ensures that all affected people are treated equally and have a fair chance to receive assistance. The second project involves the City Hall purchasing real estate to gradually provide housing for homeless families based on

citizen applications. Challenges include the need for homeless individuals to wait for housing, which can lead to dissatisfaction. The projects have evolved based on the needs and wishes of the population. For greater success, the "Unfinished Constructions" project could benefit from increased communication with the public, while the "Accommodate Homeless Families" project requires more financial resources to meet the housing needs of more individuals.

6. In Rome, Italy, the Assessorato Patrimonio Comune di Roma runs an innovative programme called "Program for the Quality of Living", which finances urban regeneration projects for municipal buildings. These buildings, which were previously used for socially beneficial purposes without involving any criminal activity, are being converted into affordable and efficient homes while also preserving existing communities. The programme aims to regenerate public property, create new housing and maintain social connections involving the local administration, inhabitants, the national government and universities. The project has benefited over 400 fragile families through funding from national and European sources. The primary challenge is relocating families during the renovation work. The project has not undergone any changes so far, and the work is progressing well towards its conclusion. To increase its success, it is recommended to select properties that promote social diversity.

7. In Latvia, the Ministry of Economy supports families with children through two key housing programmes. The first programme offers a bank loan guarantee for families with regular income but insufficient savings for a down payment, covering up to EUR 250,000. The second programme, Subsidy Balsts, provides one-time financial support ranging from EUR 8,000 to EUR 10,000, and increasing by EUR 2,000 for energy-efficient homes. Guarantees range from 5 per cent to 30 per cent of the loan amount, with caps based on the number of children, and a 10-year repayment period. These programmes have provided EUR 200 million in guarantees, supporting EUR 1.9 billion in real estate investments and benefiting around 25,000 families. The Subsidy Balsts programme alone has helped over 1,200 families, with public spending amounting to EUR 10 million. One challenge is securing additional funding for programme enhancements. In 2022, approximately 40 per cent of new mortgages included a guarantee, indicating the programme's growing popularity. To encourage more lending, especially in regions outside the capital, it is recommended to increase guarantee amounts per child and for energy-efficient homes. The housing guarantee programme aims not only to improve housing affordability but also to support young families and have a positive impact on the country's demographics.

8. In Montenegro, the Ministry of Spatial Planning, Urbanism and State Property has implemented "Project 1000+" in cooperation with the Development Bank of the Council of Europe. The project has successfully resolved housing issues for 1,552 families over four phases. This social housing project targets citizens with medium and lower incomes by providing subsidies on mortgage interest rates to make homeownership more accessible. Key components of the project include fixed interest rates of 2.99 per cent, optional down payments, low loan processing fees and extended repayment periods. The programme also offers a 50 per cent discount on notary services and allows the purchase of both new and existing apartments that meet energy efficiency standards. The project's structure involves coordination between multiple stakeholders, including government bodies, financial institutions and the Notary Chamber of Montenegro. The main challenges faced include managing the complex administrative processes, verifying eligibility criteria and ensuring effective coordination among stakeholders. The project has evolved by adapting its phases to better meet the needs of users, particularly priority target groups. The goal is to transform the project into a permanent initiative with a continuous credit line, rather than dividing it into phases. To further enhance the programme, it is recommended to conduct housing needs research, involve key stakeholders in the design and implementation process and ensure equity and accessibility for low-income and vulnerable populations. Additionally, establishing robust monitoring and evaluation mechanisms, along with a comprehensive public outreach strategy, will help track progress and inform potential beneficiaries about the project and its benefits.

9. In Poland, the Ministry of Economic Development and Technology is spearheading investments in energy-efficient housing for low- and average-income households under the Polish National Recovery and Resilience Plan. The goal is to increase the supply of energy-

efficient housing that these households cannot afford in the private market. The programme supports the construction of low-emission multi-apartment residential buildings using renewable energy sources such as photovoltaic panels and solar collectors, with energy consumption targeted to be 20 per cent lower than the minimum energy performance standards. The initiative also includes municipal housing stock, training and assisted living facilities, shelters for the homeless and temporary accommodations. Beneficiaries include social housing associations and other social housing investors who can seek support through municipalities. The programme offers substantial financial support, covering 25 per cent of project costs for moderate-income households (up to 60 per cent with additional funding) and 15 per cent for low-income households (up to 95 per cent with additional funding). The investments must adhere to the "Do No Significant Harm" principle. Moreover, grants are available for the renovation of municipal dwellings for those at risk of energy poverty and for renewable energy installations in new buildings, covering 30 per cent and 50 per cent of the costs, respectively. The initiative is ongoing, with final results expected in 2026. Challenges include ensuring sufficient co-financing from national funds and meeting the "Do No Significant Harm" requirements. The programme's success depends on maintaining adequate funding levels and providing clear guidance for compliance with energy efficiency standards. Policymakers are advised to integrate energy efficiency components into housing support programmes to effectively address both housing affordability and climate challenges, achieving a synergistic impact.

10. In Slovakia, the Ministry of Transport oversees the Programme of Housing Development, introduced in 1998. The programme aims to support housing construction, particularly social rental housing, through subsidies and low-interest loans from the State Housing Development Fund. It targets municipalities, city districts, and non-profit organizations with the goal of increasing public rental housing availability for low-income households. Through this programme, nearly 50,000 new social dwellings have been constructed across Slovakia. Eligibility for social housing is primarily based on income levels, with special provisions for households with disabilities, single parents, and essential service providers. Over 1,000 municipalities have utilized the programme, with funding coming from the state budget and municipal resources. The programme has led to a significant increase in social housing stock, with almost 50,000 new social dwellings. It has also introduced innovative financing through a combination of loans and subsidies covering 100 per cent of acquisition costs. Despite stable foundational targets and conditions, the programme adapts to economic changes, such as construction cost increases. Challenges include ensuring rental affordability for vulnerable groups. The programme’s success depends on stable budget allocations, interest from local bodies and higher state budget allocations. Lessons learned emphasize the importance of a stable budget, optimal subsidy-loan ratios, long-term local housing development visions, continuity of strategic plans irrespective of political cycles and the availability of land for housing construction.

11. In Spain, housing policy is managed by the autonomous communities. Among the 17 regions, the Autonomous Community of the Basque Country stands out as an example of best practices due to its consistent and socially oriented housing policies which have remained stable over time. Zaragoza is also noted locally for its effective housing practices. More information can be found at Euskadi's urban planning website (https://www.euskadi.eus/gobierno-vasco/planificacion-territorial-agenda-urbana/). The main challenges include scarce land for new constructions and contaminated areas. Trends have evolved to provide better consumer knowledge, with property registers now including information on energy efficiency, potential soil contamination and CO_2 absorption projects, and traditional data on ownership and property charges. It is recommended to include information on architectural barriers. To enhance housing practices, it would be beneficial to unify the control of all legal procedures for buying and renting properties within the property registers. This institution plays a key role in guaranteeing property rights, facilitating financing and increasing user knowledge and accessibility. Successful best practices rely on two key elements: a robust legal institution that consolidates all housing and rental information, and a sensible, socially-invested legal framework that is maintained over time.

12. Another best practice in Spain is “Arrel initiative”, introduced by the Polytechnic University of the Autonomous Community of Valencia, which is a regional strategy aimed at identifying and reactivating potential dwellings for new generations or new inhabitants in

depopulated rural areas. This innovative approach addresses the demographic challenge by meeting housing demands to stabilize populations in those areas. Data highlights the urgency of this initiative, as the rural population dropped from 43 per cent in 1960 to less than 20 per cent today. Additionally, 172 out of 542 municipalities in the Valencian Autonomous Community have an ageing index above 250 per cent. The strategy involves conducting thorough visits to municipalities covered by the Valencian Anti Depopulation Agenda (AVANT Agenda) to assess underused housing stock. The Arrel digital platform helps facilitate communication and serves as a contact point between these municipalities and potential residents. It allows users to find suitable municipalities based on their preferences, viewable in mosaic and map formats. One of the challenges faced is the large number of houses needing analysis. Success has been growing as more case studies emerge, and the initiative is linked to specific funding. It is crucial to promote dialogue and raise awareness, emphasizing that it is possible to stabilize populations in rural areas. For more information, visit the website of Arrel (https://arrel.gva.es/va/).

13. In Türkiye, the Housing Development Administration aims to meet 5 -10 per cent of the country's housing needs through its rapid housing production practices. Under the Turkish Government's "planned urbanization and housing production" programme from 2003 to February 2024, the Administration has initiated the construction of 1,324,392 housing units across 81 cities and 5,897 construction sites. The Administration faces challenges in securing financing for its projects. Approximately 87 per cent of the Administration's project portfolio consists of social housing projects, with the remaining 13 per cent based on revenue-sharing projects to raise funds. Securing adequate financing to subsidize social housing is crucial for the continued success of these initiatives.

14. In Ukraine, the State Youth Housing Agency runs preferential state housing programmes through the State Fund for Youth Housing Construction, providing housing for 43,000 families. These programmes target large families, internally displaced persons (IDPs), military personnel and those needing improved housing conditions. Funding comes from state and local budgets as well as international assistance, offering affordable mortgages where the state covers 30 per cent of housing costs and individuals pay the remaining 70 per cent. Challenges include the limited availability of funds. The programme has expanded to include more eligible participants and introduced transparent, publicly known queues. To enhance the programme's success, attracting more international donors is recommended.

Table A1. **Household by country, 2004-2021**

Country	*Frequency*	*Percentage*
Austria	62896503	1.8
Belgium	80409840	2.3
Bulgaria	38635426	1.1
Switzerland	49433315	1.4
Cyprus	4781338	0.1
Czech Republic	67811161	2.0
Germany	597098297	17.3
Denmark	47279961	1.4
Estonia	9973262	0.3
Spain	297186657	8.6
Finland	43800494	1.3
France	466783641	13.5
Greece	70076791	2.0
Croatia	16452866	0.5
Hungary	64095124	1.9
Ireland	28566871	.8
Iceland	1883864	.1
Italy	399009358	11.6
Lithuania	20838688	0.6
Luxembourg	3580774	0.1
Latvia	13400190	0.4
Malta	2316675	0.1
Netherlands	120445210	3.5
Norway	40903245	1.2
Poland	212507145	6.2
Portugal	67833178	2.0
Romania	104276877	3.0
Serbia	19527364	0.6
Sweden	79190468	2.3
Slovenia	12389158	0.4
Slovak Republic	29995425	0.9
United Kingdom	372649458	10.8
Total	3446028624	100.0

Table A2. **Distribution of observations, 2004-2020**

Year	*Number*	*Percentage*
2004	92917752	2.7
2005	191346979	5.6
2006	192935766	5.6
2007	207790539	6.0
2008	210106792	6.1
2009	212087199	6.2
2010	215093015	6.2
2011	216839014	6.3
2012	219116395	6.4
2013	221960050	6.4
2014	223732575	6.5
2015	225211998	6.5
2016	226047862	6.6
2017	227354501	6.6
2018	228169487	6.6
2019	201148177	5.8
2020	134170522	3.9
Total	3446028624	100.0

Table A3. **Household type**
(Percentage of total households)

	one person household	*2 adults no dependent children, both adults under 65 years*	*2 adults, no dependant children, at least one adult 65 years or more*	*single parent household, one or more dependent children*	*2 adults with dependent children*	*other households with dependent children*	*other*	*Total household with children*
Austria	36.2	15.4	11.8	3.3	20.2	13.1	0.0	36.6
Belgium	34.3	15.8	12.6	5.8	22.4	8.9	0.2	37.0
Bulgaria	26.0	12.3	13.6	2.7	19.2	26.1	0.1	48.0
Switzerland	34.0	19.4	13.1	3.0	19.5	8.6	2.4	31.1
Cyprus	20.0	14.8	15.5	3.1	27.6	18.9	0.0	49.6
Czech Republic	26.5	16.5	13.5	4.1	24.7	14.8	0.0	43.5
Germany	40.0	16.7	14.4	4.6	17.9	6.2	0.2	28.8
Denmark	44.5	16.8	11.0	5.4	19.3	3.0	0.1	27.6
Estonia	36.2	14.4	11.0	5.0	21.5	11.7	0.3	38.2
Spain	22.9	14.6	13.3	2.6	24.8	21.3	0.4	48.8
Finland	40.7	19.6	12.3	4.0	19.8	3.6	0.0	27.4
France	34.6	16.9	13.3	5.3	23.6	6.0	0.4	34.8
Greece	22.7	11.5	16.3	1.6	25.2	22.4	0.3	49.2
Croatia	24.5	10.3	14.5	1.8	20.6	28.3	0.0	50.7
Hungary	29.7	15.6	12.3	4.3	21.7	16.2	0.2	42.2
Ireland	23.0	14.5	11.2	7.5	28.5	15.3	0.0	51.3
Iceland	30.7	15.0	10.0	7.1	27.4	9.5	0.2	44.0
Italy	30.8	10.5	14.9	3.2	22.8	17.8	0.0	43.8
Lithuania	34.2	12.7	10.9	5.7	22.3	14.1	0.1	42.2
Luxembourg	30.8	15.3	10.9	4.2	27.0	11.8	0.0	43.1
Latvia	30.3	13.7	12.2	5.3	19.6	18.4	0.5	43.3
Malta	24.2	14.2	13.1	3.4	21.7	23.4	0.0	48.5
Netherlands	36.7	17.4	13.0	3.7	22.9	6.1	0.2	32.6
Norway	42.9	15.8	11.1	6.0	20.5	3.5	0.3	30.0
Poland	24.3	13.4	9.9	2.1	22.2	25.5	2.6	49.8
Portugal	19.6	12.7	16.0	3.9	25.9	21.7	0.1	51.6
Romania	26.7	13.4	11.3	2.3	23.7	22.6	0.1	48.6
Serbia	22.3	10.3	13.8	2.7	18.5	32.4	0.0	53.6
Sweden	41.8	16.4	12.5	5.5	19.5	4.0	0.3	29.0
Slovenia	26.7	11.4	12.6	3.7	26.5	18.9	0.0	49.2
Slovak Republic	22.8	11.6	10.9	2.5	24.2	28.1	0.0	54.8
United Kingdom	30.0	18.0	13.5	6.0	20.8	10.9	0.9	37.7

Table A4

	RA_HCOST/INCOME affordability		*HS_Housing Stress_30%_40% income*	
	Mean	Median	Mean	Median
Austria	21.56	17.52	30.53	25.01
Belgium	26.79	22.98	35.85	31.55
Bulgaria	21.80	17.36	30.60	22.80
Switzerland	26.41	22.82	36.50	32.14
Cyprus	24.86	21.85	31.16	28.26
Czech Republic	19.96	15.47	28.55	23.68
Germany	23.30	19.81	31.17	27.01
Denmark	31.30	27.81	38.33	34.01
Estonia	20.55	14.39	34.62	24.57
Spain	27.98	21.18	43.32	36.09
Finland	26.10	23.02	36.18	34.23
France	25.49	22.37	31.62	27.34
Greece	30.15	24.47	43.73	37.63
Croatia	23.17	19.55	32.92	26.97
Hungary	21.73	16.99	32.13	26.67
Ireland	26.42	18.12	28.53	17.95
Iceland	46.68	37.70	46.74	38.05
Italy	25.80	20.24	36.97	30.49
Lithuania	18.33	12.40	25.97	16.67
Luxembourg	40.19	28.21	41.76	32.58
Latvia	14.80	9.79	18.27	9.68
Malta	12.95	7.76	15.09	3.68
Netheerlands	30.43	27.21	36.10	32.08
Norway	27.28	22.32	37.25	30.61
Poland	22.08	17.32	32.05	25.56
Portugal	20.83	16.21	29.29	22.96
Romania	23.84	16.91	38.19	24.01
Serbia	30.91	23.60	50.71	45.00
Sweden	29.19	25.06	41.48	37.79
Slovenia	18.47	15.18	23.24	19.29
Slovak Republic	16.32	12.78	23.24	18.18
United Kingdom	28.81	23.97	40.11	34.50

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