

HC1.2. HOUSING COSTS OVER INCOME

Definitions and methodology

Housing costs can represent a substantial financial burden to households, especially low-income households. Two indicators relating to housing costs are presented in this indicator:

- The median of the ratio of housing costs over income, which gives an indication of the financial pressure that households face from housing costs (indicators HC1.2.1, HC1.2.2, HC1.2.A1, HC1.2.A2)
- The housing cost overburden rate, which measures the proportion of households or population that spend more than 40% of their disposable income on housing costs (in line with Eurostat methodology) (indicators HC1.2.3, HC1.2.4, HC1.2.A3, HC1.2.A3_a-c, HC1.2.A4).

Housing costs can refer to: (1) a narrow definition based on rent and mortgage costs (principal repayment and mortgage interest) (indicators HC1.2.1, HC1.2.2, HC1.2.3, HC1.2.A1, HC1.2.A2, HC1.2.A3, HC1.2.A3_a-c); or (2) a wider definition that also includes the costs of mandatory services and charges, regular maintenance and repairs, taxes and utilities, which are referred to as “total housing costs” below (indicators HC1.2.4, HC1.2.A4).

Housing costs are considered as a share of household disposable income, which includes social transfers (such as housing allowances) and excludes taxes. Income is equivalised for household size based on a common equivalence elasticity (the square root of household size), which implies that a household’s economic needs increase less than proportionally with its size. Housing costs refer to the primary residence. The data presented here are based on household survey microdata and concern national household- or population-level data.

For a discussion of different measures of housing affordability and their advantages and limits, please see indicator [HC1.5 Overview of affordable housing indicators](#) in the OECD Affordable Housing Database. For policy measures aiming to support households with housing costs, please see indicators in the [PH2, PH3 and PH4](#) series.

Key findings

Median housing costs tend to be higher for tenants relative to homeowners servicing a mortgage.

In most countries, median housing costs – based on the narrow definition described above – are higher for tenant households than they are for owner-with-mortgage households (see Figure HC1.2.1 and online worksheet HC1.2.A1 for earlier years). Outright owners are not considered here as they do not face mortgage costs (see Figure HC1.2.4 and the discussion below for information on the burden of total housing costs). The median burden of rent payments for tenant households is highest in Finland (32%), Norway (29%), Sweden (29%), the Netherlands (29%), Iceland (28%), and Denmark (27%). It

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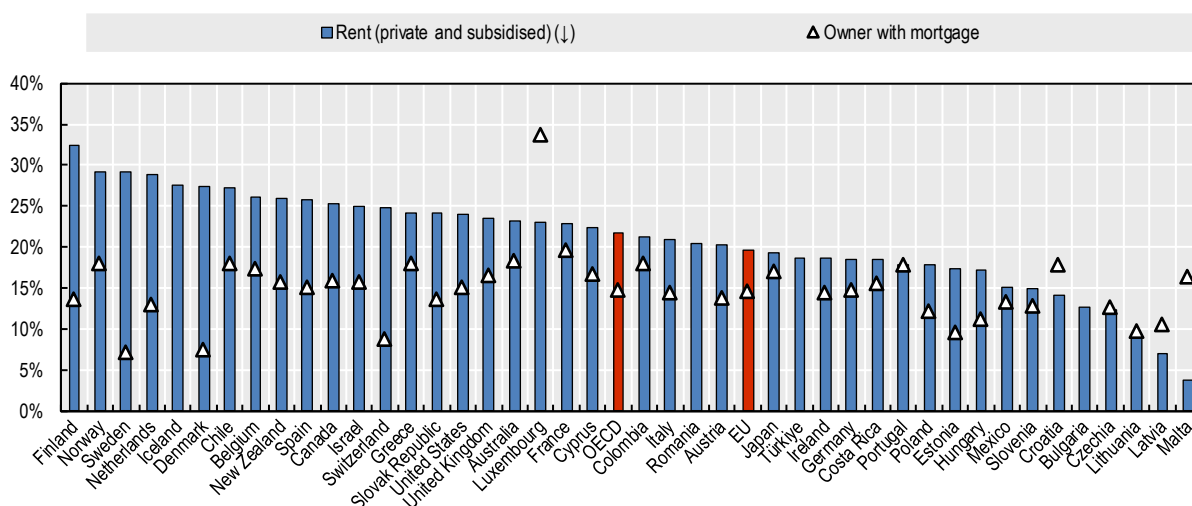
The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

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is lowest in Central and Eastern European countries, as well as in Portugal (18%), Mexico (15%), and Malta (4%).

Figure HC1.2.1: Households' housing cost burden (mortgage and rent cost) as a share of disposable income.

Median mortgage burden (principal repayment and interest payments) or rent burden (private market and subsidised rent) as a share of disposable income, in percent, 2022 or latest year available ^{1, 2, 3, 4, 5, 6, 7}



Notes. 1. Housing costs cover only those relating to mortgage costs (principal repayment and interest payments) and rental costs (for both private market and subsidised rental housing). See HC1.2.4 and HC1.2.A4 for data on total housing cost burden (which includes mortgage principal and interest repayment, rents, structural insurance, mandatory services and charges, regular maintenance and repair, taxes and utilities (including electricity, water, gas and heating)).

2. Housing costs are considered as a share of household disposable income, which includes social transfers (such as housing allowances) and excludes taxes.

3. In Chile, Colombia, Mexico and the United States, gross income instead of disposable income is used due to data limitations. In the United Kingdom, net income does not adjust for local council taxes and housing benefits. In Türkiye, net income does not adjust for personal income taxes.

4. No data on mortgage principal repayments available for Bulgaria, Iceland and Türkiye due to data limitations.

5. Results only shown if category composed of at least 100 observations.

6. Data for Japan only available on the respondent level due to data limitations.

7. Data for Australia, Japan, Switzerland, United Kingdom and the United States refer to 2021, for Hungary, Norway and Türkiye to 2020, for Canada to 2019, for Iceland to 2018, for Israel and New Zealand to 2017.

Source: OECD calculations based on the European Survey on Income and Living Conditions (EU-SILC 2022), except for Switzerland (2021), Norway (2020) and Iceland (2018); the Household, Income and Labour Dynamics Survey (HILDA) for Australia (2021); the Canada Income Survey (CIS 2019); the Encuesta de Caracterización Socioeconómica Nacional (CASEN) for Chile (2022); the Gran Encuesta Integrada de Hogares (GEIH) for Colombia (2022); the Encuesta Nacional de Hogares (ENAH) for Costa Rica (2022); calculations from the Bank of Israel for Israel (2017), the Japan Household Panel Study (JHPS 2022); the Korean Housing Survey (2021); the Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH) for Mexico (2022); Household Expenditure Survey (HES, Stats NZ) for New Zealand (2017); Türkiye-National SILC (2020); Understanding Society - The UK Household Longitudinal Study (2021); the American Community Survey (ACS) for the United States (2021).

Note by the Republic of Türkiye: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Türkiye recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Türkiye shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Türkiye. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

Median housing costs for owners and tenants vary across the income distribution.

The median housing cost burden (based on the narrow definition of rent and mortgage payments) varies considerably across the income distribution and is often significantly higher for lower-income households relative to higher-income households. In nearly all countries, median housing costs are highest for households in the bottom quintile of the income distribution (Figure HC1.2.2, see online worksheet HC1.2.A2 for other quintiles and earlier years), regardless of whether the household is a tenant (Panel A) or services a mortgage (Panel B):

- Low-income tenant households face a higher housing cost burden relative to higher-income tenant households in all countries (Figure HC1.2.2 – Panel A). In most countries, low-income tenant households face median housing costs between 20 to 40% of disposable income. In eight countries (Colombia, Chile, Finland, New Zealand, Spain, Sweden, Switzerland, and the United States), median housing costs consume more than 40% of disposable income for tenant households in the bottom quintile of the income distribution. By contrast, the median housing cost burden is lowest (below 20%) among tenant households in four countries: Czechia, Ireland, Latvia and Malta.

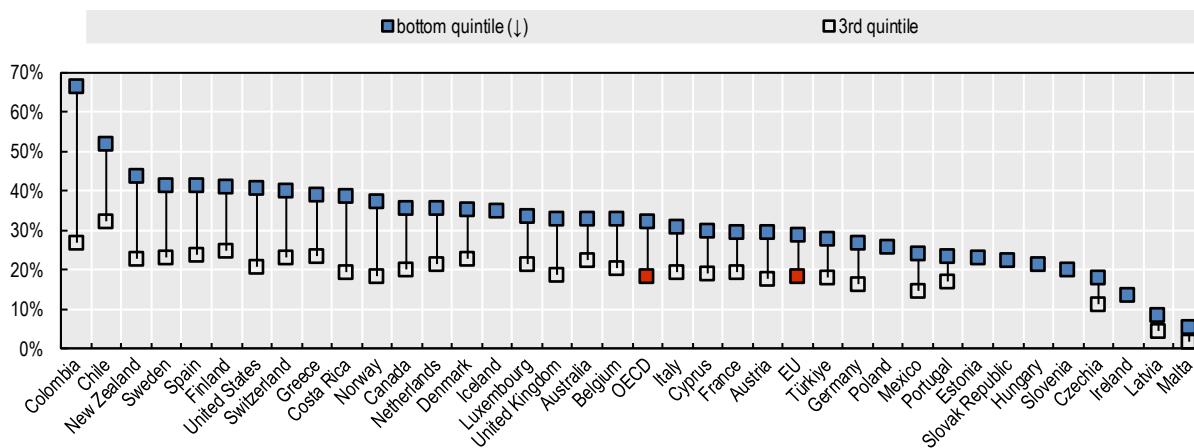
In 26 countries, there is at least a 10-point difference between the median housing cost burden of tenants in the bottom and third income quintiles. The difference exceeds 20 percentage points in Chile, Colombia, New Zealand, the Slovak Republic, and the United States.

- Among homeowners with a mortgage, in most countries with available data, the median mortgage cost as a proportion of disposable income is highest for households in the bottom quintile of the income distribution (Figure HC1.2.2 – Panel B). In Chile, Colombia, Portugal, Spain, and the United States, median mortgage costs represent between 34% and 47% of disposable income among households in the bottom quintile of the income distribution. By contrast, median mortgage costs represent less than 15% of disposable income among low-income owner-with-mortgage households in Finland, the Netherlands, Sweden, and Switzerland. In Chile, Colombia, Portugal, Spain, and the United States, low-income households have a substantially higher mortgage burden relative to households in the third quintile – at least 15 percentage points (Panel B, Figure HC1.2.2). By contrast, in Australia, Finland, Norway, and Sweden owner-with-mortgage households in the bottom and the third quintiles of the income distribution face similar median mortgage burdens (less than a 4-point difference). The Netherlands is the only country where households in the third quintile have a higher median mortgage burden than households in the lowest quintile – but only by a small margin (less than 2 percentage points).

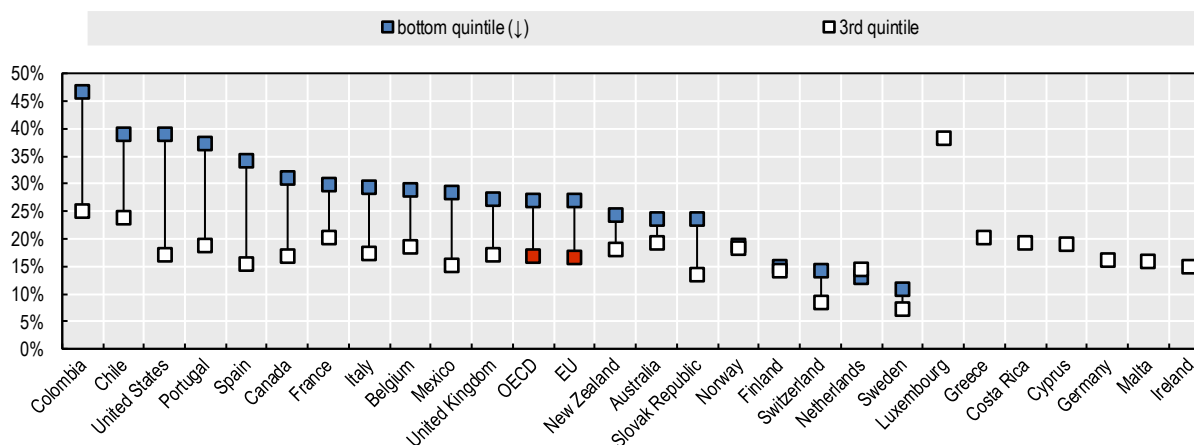
Various factors contribute to higher (or lower) housing cost burdens across tenure types at different income levels. For instance, access to mortgages, mortgage conditions, loan-to-value and loan-to-income ratios may help to explain variation across countries and income quintiles (André, 2016; Whitehead and Williams, 2016).

Figure HC1.2.2. Housing cost burden of low- and middle-income households as a share of disposable income

Panel A: Median rent burden (private market and subsidised rent) as a share of disposable income in the bottom and the third quintiles of the income distribution, 2022 or latest year available ^{1,2,3,4,5}



Panel B: Median mortgage burden (principal repayment and interest payments) as a share of disposable income in the bottom and the third quintiles of the income distribution, 2022 or latest year available ^{1,2,3,4,5}



Note: 1. Housing costs cover only those relating to mortgage costs (principal repayment and interest payments) and rental costs (for both private market and subsidised rental housing). See HC1.2.4 and HC1.2.A4 for data on total housing cost burden (which includes mortgage principal and interest repayment, rents, structural insurance, mandatory services and charges, regular maintenance and repair, taxes and utilities (including electricity, water, gas and heating)).

2. Housing costs are considered as a share of household disposable income, which includes social transfers (such as housing allowances) and excludes taxes.

3. In Chile, Colombia, Mexico and the United States, gross income instead of disposable income is used due to data limitations. In the United Kingdom, net income does not adjust for local council taxes and housing benefits. In Türkiye, net income does not adjust for personal income taxes.

4. Results only shown if category composed of at least 100 observations.

5. Data for Australia, Japan, Switzerland, the United Kingdom, and the United States refer to 2021, for Hungary, Norway and Türkiye to 2020, for Canada to 2019, for Iceland to 2018, for New Zealand to 2017.

Source: OECD calculations based on the European Survey on Income and Living Conditions (EU-SILC 2022), except for Switzerland (2021), Norway (2020) and Iceland (2018); the Household, Income and Labour Dynamics Survey (HILDA) for Australia (2021); the Canada Income Survey (CIS 2019); the Encuesta de Caracterización Socioeconómica Nacional (CASEN) for Chile (2022); the Gran Encuesta Integrada de Hogares (GEIH) for Colombia (2022); the Encuesta Nacional de Hogares (ENAH) for Costa Rica (2022); the Japan Household Panel Study (JHPS 2022); the Korean Housing Survey (2021); the Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH) for Mexico (2022); Household Expenditure Survey (HES, Stats NZ) for New Zealand (2017); Türkiye-National SILC (2020); Understanding Society - The UK Household Longitudinal Study (2021); the American Community Survey (ACS) for the United States (2021).

Tenants are more likely than homeowners to be overburdened by housing costs, with typically the highest overburden rates among low-income households.

This indicator considers people who spend more than 40% of disposable income on housing as “overburdened” by housing costs. Figure HC1.2.3 – Panel A shows the share of the population in the bottom quintile of the income distribution who face housing cost overburden, by tenure type (see online worksheet HC12.A3 for earlier years and other quintiles, and Indicator HM1.3 for more information on tenure types across the income distribution).

In Colombia, Chile, Finland, Israel, New Zealand, more than half of tenants in the private rental market are overburdened by housing costs. By contrast, in many Central and Eastern European countries, less than 20% of tenants are overburdened by housing costs.

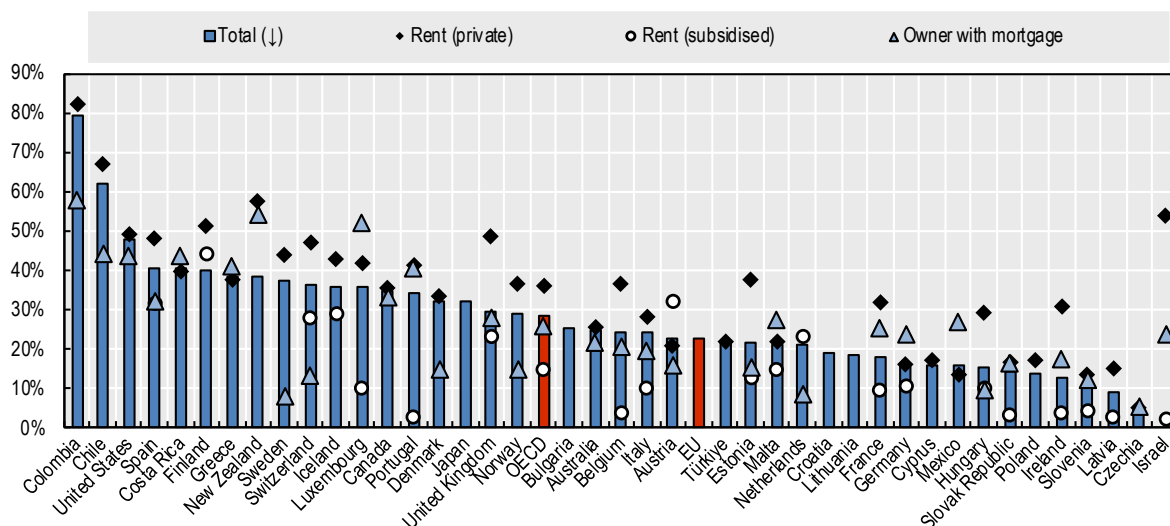
In almost all countries, people living in subsidised rental dwellings are less likely to be overburdened by housing costs than people living in privately rented dwellings, often by a significant margin. In Israel for example, just 2% of tenants in subsidised rental housing are overburdened by housing costs, compared to 54% of private market rental tenants.

Overburden rates among low-income people living in owner-with-mortgage households vary widely across countries. Low-income people living in owner-with-mortgage households in Czechia, the Netherlands, and Sweden are the least likely to face a housing cost overburden, with an overburden rate at or below 10%. The overburden rate among the low-income population living in owner-with-mortgage households is highest in Colombia (58%).

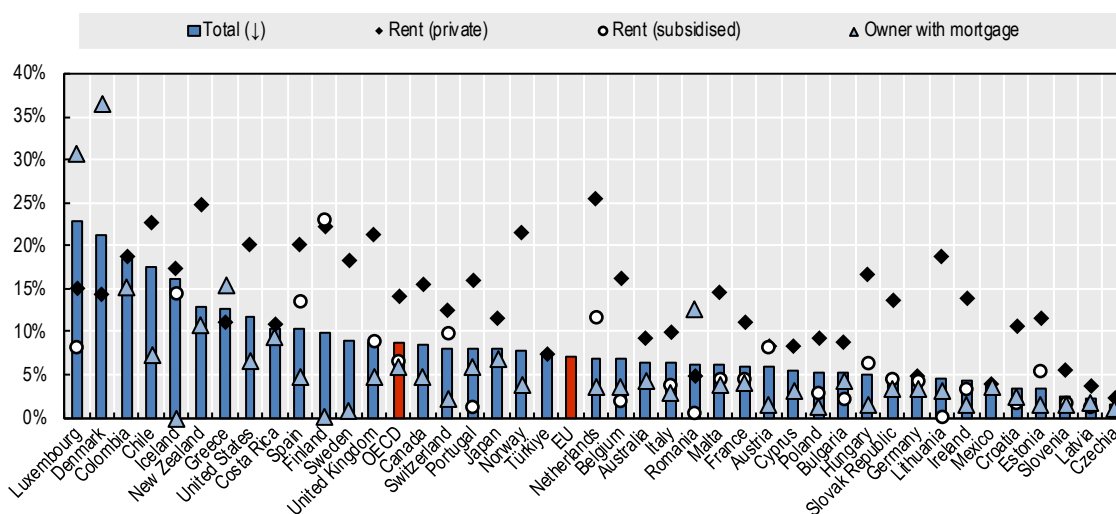
Mortgage and rent burdens are not only an issue for low-income people; high housing costs can also overburden people with higher incomes. In Chile, Finland, the Netherlands, New Zealand, Norway, Spain, and the United Kingdom, more than one in five tenants in the private rental market (regardless of income level) are overburdened by housing costs (Figure HC1.2.3 – Panel B). Among the total population servicing a mortgage (regardless of income level), overburden rates vary widely and generally comprise less than 15% of the total population, except in Colombia, Denmark, Greece and Luxembourg where they comprise a bigger share (Figure HC1.2.3b).

Figure HC1.2.3. Housing cost overburden rate, in % of the population

A. Share of population in the bottom quintile of the income distribution spending more than 40% of disposable income on mortgage and rent, by tenure, in percent, 2022 or latest year ^{1,2,3,4,5}



B. Share of population spending more than 40% of disposable income on mortgage and rent, by tenure, in percent, 2022 or latest year ^{1,2,3,4,5}



Note: 1. Housing costs cover only those relating to mortgage costs (principal repayment and interest payments) and rental costs (for both private market and subsidised rental housing). See HC1.2.4 and HC1.2.A4 for data on total housing cost burden (which includes mortgage principal and interest repayment, rents, structural insurance, mandatory services and charges, regular maintenance and repair, taxes and utilities (including electricity, water, gas and heating)).

2. Housing costs are considered as a share of household disposable income, which includes social transfers (such as housing allowances) and excludes taxes.

3. In Chile, Colombia, Mexico and the United States, gross income instead of disposable income is used due to data limitations. In the United Kingdom, net income does not adjust for local council taxes and housing benefits. In Türkiye, net income does not adjust for personal income taxes.

4. Results only shown if category composed of at least 100 observations.

5. Data for Australia, Japan, New Zealand, Switzerland, the United Kingdom, and the United States refer to 2021, for Hungary, Norway and Türkiye to 2020, for Canada to 2019, for Iceland to 2018, for Israel.

Source: OECD calculations based on the European Survey on Income and Living Conditions (EU-SILC 2022), except for Switzerland (2021), Norway (2020) and Iceland (2018); the Household, Income and Labour Dynamics Survey (HILDA) for Australia (2021); the Canada Income Survey (CIS 2019); the Encuesta de Caracterización Socioeconómica Nacional (CASEN) for Chile (2022); the Gran Encuesta Integrada de Hogares (GEIH) for Colombia (2022); the Encuesta Nacional de Hogares (ENAH) for Costa Rica (2022); calculations from the Bank of Israel for Israel (2017), the Japan Household Panel Study (JHPS 2022); the Korean Housing Survey (2021); the Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH) for Mexico (2022); Household Expenditure Survey (HES, Stats NZ) for New Zealand (2021); Türkiye-National SILC (2020); Understanding Society – The UK Household Longitudinal Study (2021); the American Community Survey (ACS) for the United States (2021).

Housing-related costs beyond rent and mortgage payments increase the burden on low-income households – often by a wide margin.

In addition to mortgage costs (principal repayment and mortgage interest) and rents considered above, households face a variety of other housing-related costs. These include costs relating to insurance, mandatory services and charges, regular maintenance and repair, taxes, and utilities, which can significantly push up total housing costs. These additional costs are also relevant to – and may be substantial for – outright owners.

Across countries, low-income households renting at private market rates and households servicing a mortgage face high overburden rates when total housing costs are taken into account. In 17 countries, more than half of tenants in the bottom income quintile spend over 40% of their disposable income on total housing costs (Figure HC1.2.4, and online worksheet HC1.2.A4 for earlier years and data for other quintiles). By contrast, in just five countries – Austria, Cyprus, Germany, Latvia, and Malta – fewer than half of low-income tenants in the private market are overburdened when total housing costs are taken into account. With respect to households servicing a mortgage, in ten countries, over half of households are considered overburdened when total housing costs are taken into account. In just six countries – Finland, Iceland, Italy, Norway, Poland, and Switzerland – less than half of low-income households with a mortgage face total housing costs that amount to more than 40% of their disposable income.

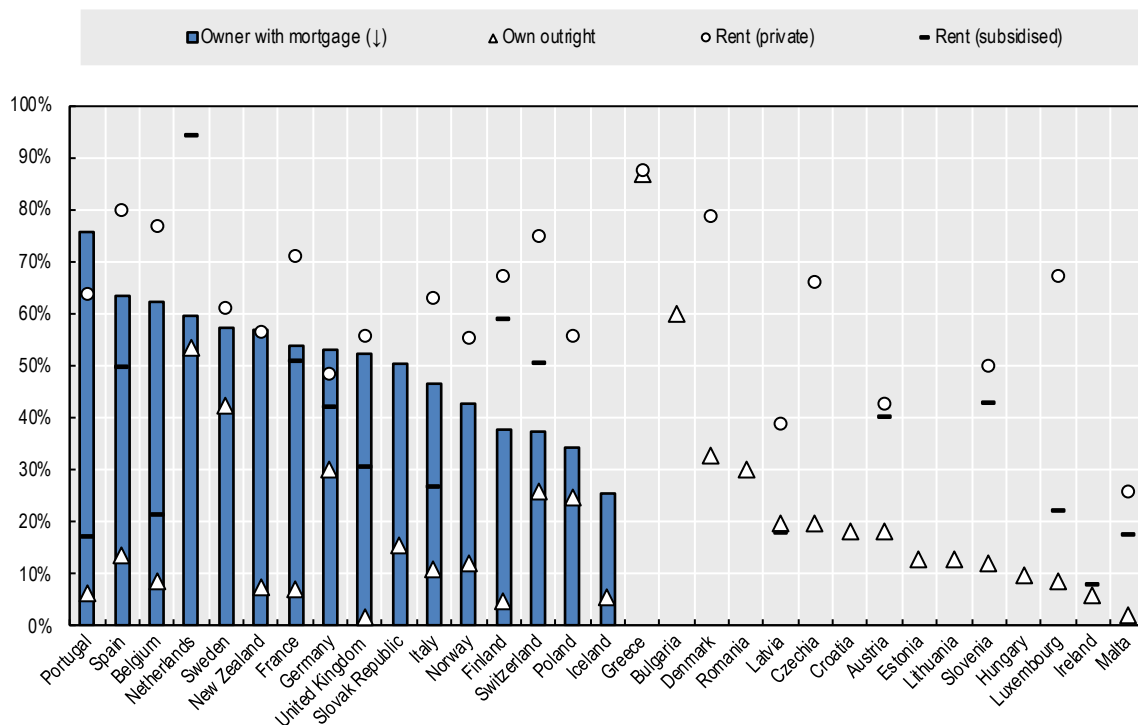
In just three countries – Germany, New Zealand, and Portugal – households servicing a mortgage are more likely to be overburdened by total housing costs than tenants renting in the private market.

In most countries, the total housing cost overburden rate is lower -- often considerably -- among tenants in subsidised housing. In Belgium and Luxembourg, for example, the overburden rate amongst subsidised tenants is less than half the overburden rate amongst tenants in the private rental market (about 20%, compared to 70%). On the other hand, in Austria, Finland, Germany, and Slovenia, the difference in the overburden rate among tenants in private and subsidised rental housing is relatively small.

As might be expected, the total housing cost overburden rate is often lower among poor households that are outright owners of their dwellings, compared to those who are renting or paying off a mortgage. Nevertheless, the overburden rate is still considerable among outright owners in some countries. For instance, in Bulgaria, 60% of low-income outright-owner households suffer from total housing cost overburden. In Greece, this is as high as 87%.

HC1.2.4. Total housing cost overburden rate among low-income households, by tenure,

Share of households in the bottom quintile of the income distribution paying more than 40% of disposable income on total housing costs, by tenure, in percent, 2022 or latest year available ^{1,2,3,4,5,6,7}



Note: 1. Data on total housing cost only available for European countries and New Zealand due to data limitations.
 2. Total housing costs include mortgage principal and interest repayment, rents, structural insurance, mandatory services and charges, regular maintenance and repair, taxes and utilities (including electricity, water, gas and heating).
 3. In the United Kingdom, net income does not adjust for local council taxes and housing benefits.
 4. In Norway, no tenants at subsidised rate, as tenants at subsidised rate are subsumed into the private market rent category due to data limitations.
 5. No distinction available between private or subsidised renters in New Zealand, data refer to total.
 6. Data refer to observations where the share of housing cost over income is included between 0 and 1.
 7. Data for Switzerland and the United Kingdom refer to 2021, for Hungary and Norway to 2020, for Iceland to 2018, for New Zealand to 2017.
 Source: OECD calculations based on European Survey on Income and Living Conditions (EU SILC), Household Expenditure Survey (HES, Stats NZ) for New Zealand (2017).

Data and comparability issues

This indicator is calculated based on household surveys. The European Survey on Income and Living Conditions (EU-SILC) is used for European countries; the Household, Income and Labour Dynamics Survey (HILDA) for Australia; the Canada Income Survey (CIS) for Canada; the Encuesta de Caracterización Socioeconómica Nacional (CASEN) for Chile; the Gran Encuesta Integrada de Hogares (GEIH) for Colombia; the Encuesta Nacional de Hogares (ENAH) for Costa Rica; the Japan Household Panel Study (JHPS) for Japan; the Korean Housing Survey for Korea; the Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH) for Mexico; Türkiye-National SILC for Türkiye; Understanding Society - The UK Household Longitudinal Study for the United Kingdom; and the American Community Survey (ACS) for the United States. Data for Japan are sampled on the respondent level and not on the household level.

Data collection for household surveys faced additional limitations during the COVID-19 pandemic, which may affect the quality of data for 2020 and 2021. This included challenges to conducting face-to-face interviews, as well as difficulties to interpret certain questions in the context of the pandemic (e.g. questions relating to the primary place of residence among young people who had returned to live with their parents during the pandemic). With regards to EU-SILC, there were also cross-country differences in how the reference period was defined, as some countries interpreted the reference period as “before the crisis – as usual” while others considered the impacts of the pandemic (Eurostat, 2020).

Data from EU-SILC are also subject to variation across years due to limited sample sizes. Although weights are used to help ensure data are representative of the population, and all indicators in the OECD Affordable Housing Database rely on variables with at least 100 observations, caution should still be exercised when comparing data across years.

Due to limitations in the data of these household surveys, net income which adjusts for taxes and transfers is not always available to calculate the income quintiles of countries. In Chile, Colombia, Mexico, Korea, and the United States, gross income is used rather than net income. In the United Kingdom, net income does not adjust for local council taxes and housing benefits. In Türkiye, net income does not adjust for personal income taxes.

Mortgage costs are calculated as the sum of mortgage principal repayments and mortgage interest payments. For Australia and Chile, only mortgage principal repayments are available. No data are available on mortgage principal repayments in Denmark (before 2021) and Iceland.

For Australia, Canada, Chile, Colombia, Costa Rica, Denmark, Mexico, New Zealand, Türkiye and the United States, no information on reduced/subsidised rent is available due to data limitations (see Dewilde, 2015 for a discussion of this issue for EU countries). All types of tenants are grouped into the private market rent category. For countries covered through EU-SILC, the "other" category refers exclusively to accommodation provided for free.

Total housing costs can only be computed consistently for countries analysed based on EU-SILC data and HES for New Zealand, as not all cost elements that make up total housing costs according to the EU-agreed definition are available for other countries.

Sources and further reading

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