

HC1.2. HOUSING COSTS OVER INCOME

Definitions and methodology

Housing costs can be a substantial financial burden to households, especially for low-income households. The median of the ratio of housing cost over income gives an indication of the financial pressure that households face due to housing costs. Another common measure for housing affordability used here is the housing cost overburden rate, which measures the proportion of households or population that spend more than 40% of their disposable income on housing cost (in line with Eurostat methodology). For a discussion of different measures of housing affordability and their advantages and limits, please see indicator HC1.5 Overview of affordable housing indicators. For policy measures aiming to support households with housing costs, please see indicators PH2, PH3 and PH4.

Housing costs can refer to: (1) a narrow definition based on rent and mortgage costs (principal repayment and mortgage interest); or (2) a wider definition that also includes the costs of mandatory services and charges, regular maintenance and repair, taxes and utilities, which are referred to as “total housing costs” below. 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. The data presented here are based on household survey microdata and concern national household or population level data.

Key findings

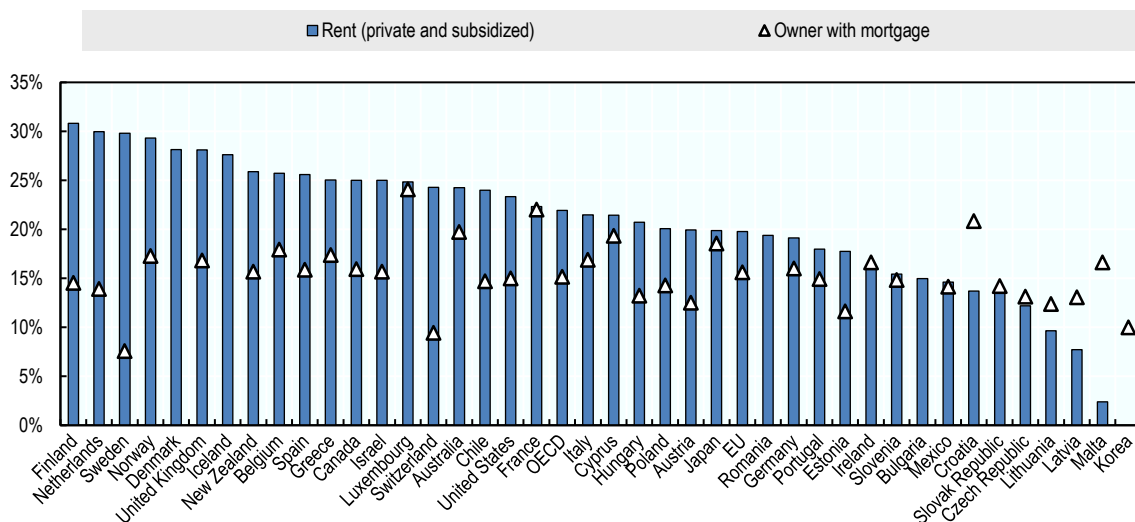
In most countries, median housing costs –based on the narrow definition – are higher for tenant households than they are for owner-with-mortgage households (see Figure HC1.2.1 and online worksheet HC1.2.A1 for earlier years). Outright owners are not considered here as they do not face mortgage costs (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, the Netherlands and Sweden (30%), Norway (29%), and Denmark and the United Kingdom (28%). It is lower in Central and Eastern European countries, as well as Japan (19%), Ireland (16%), Mexico (15%) and Malta (below 3%).

This document, as well as any data and any map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

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.

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 subsidized rent) as a share of disposable income, in percent, 2019 or latest year available ^{1 2}



Note. 1. In Chile, Mexico, New Zealand, Korea and the United States, gross income instead of disposable income is used due to data limitations. No data on mortgage principal repayments available for Denmark due to data limitations.

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

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

The present publication presents time series which end before the United Kingdom's withdrawal from the European Union on 1 February 2020. The EU aggregate presented here therefore refers to the EU including the UK. In future publications, as soon as the time series presented extend to periods beyond the UK withdrawal (February 2020 for monthly, Q1 2020 for quarterly, 2020 for annual data), the "European Union" aggregate will change to reflect the new EU country composition.

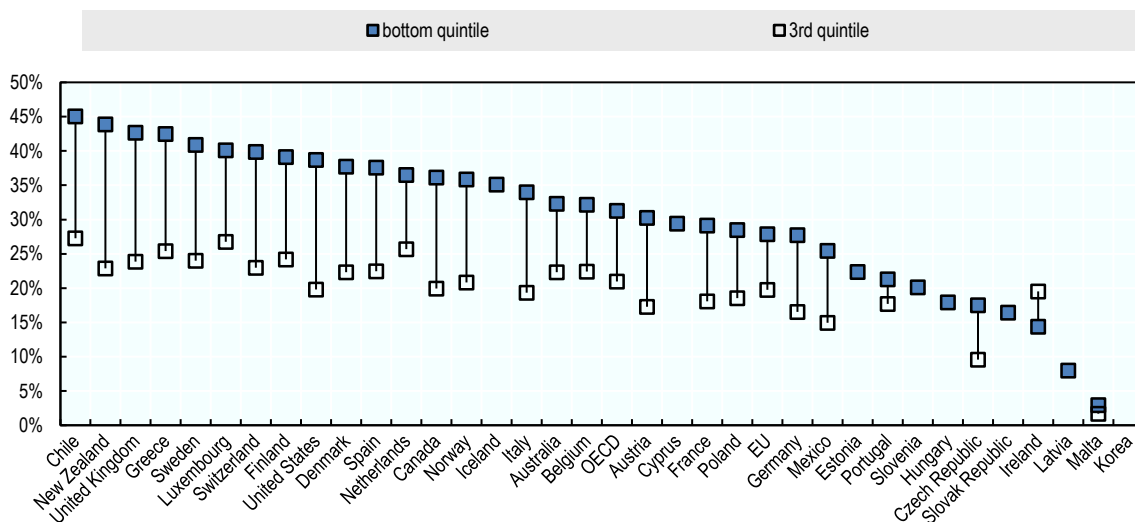
Source: OECD calculations based on European Union Statistics on Income and Living Conditions (EU SILC) survey 2019 except for Iceland, Ireland, Italy, Luxembourg and the United Kingdom (2018); the Household, Income and Labour Dynamics Survey (HILDA) for Australia (2019); the Canada Income Survey (CIS) for Canada (2018); Encuesta de Caracterización Socioeconómica Nacional (CASEN) for Chile (2017); calculations from the Bank of Israel for Israel, the Korean Housing Survey (2012); Japan Household Panel Study (JHPS) for Japan (2018); Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH) for Mexico (2018); Household Expenditure Survey (HES, Stats NZ) for New Zealand (2017); American Community Survey (ACS) for the United States (2019).

Footnote by Turkey: 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. Turkey recognizes the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue";

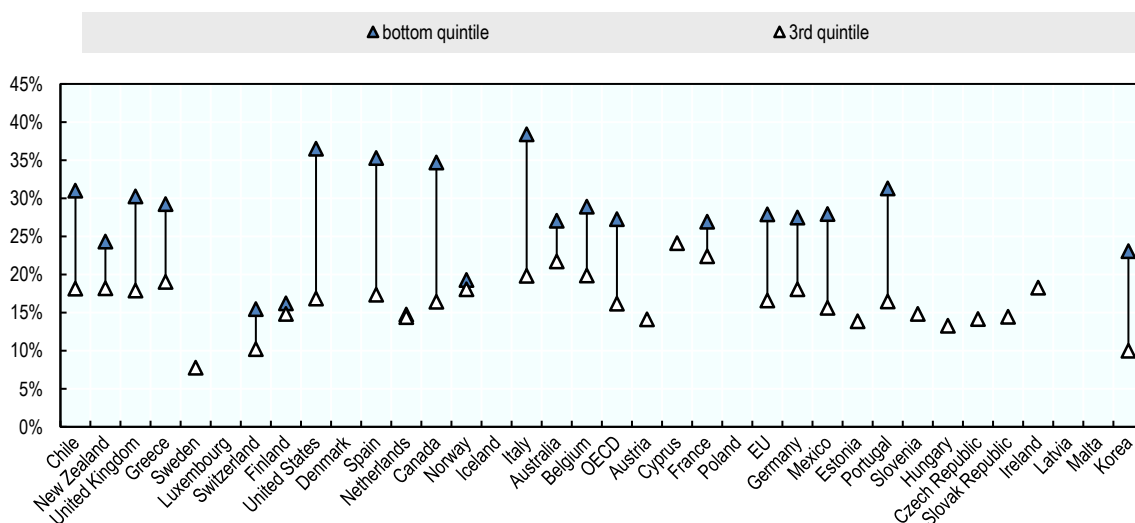
Footnote by all the European Union Member States of the OECD and the European Commission: The Republic of Cyprus is recognized by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic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

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

Panel A: Median rent burden (private market and subsidized rent) as a share of disposable income in the bottom and the third quintile of the income distribution, 2019 or latest year available ^{1 2}



Panel B: Median mortgage burden (principal repayment and interest payments) as a share of disposable income in the bottom and the third quintile of the income distribution, 2019 or latest year available ^{1 2}



Note: 1. In Chile, Mexico, New Zealand, Korea and the United States gross income instead of disposable income is used due to data limitations. No data on mortgage principal repayments available for Denmark due to data limitations.

2. Results only shown if data available for at least 100 observations in bottom quintile.

Source:

Rental and mortgage cost burdens vary across the income distribution

The housing cost burden rate (based on the narrow definition of rent and mortgage payments) varies considerably across the income distribution and is often considerably higher for lower income households. In nearly all countries, housing costs as a share of income 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 (1) is a tenant (Panel A) or (2) services an outstanding mortgage (Panel B):

- (1) Low-income tenant households face a higher housing cost burden than their better-off peers in the majority of countries (Figure HC1.2.2 - Panel A). In Chile, Greece, New Zealand and the United Kingdom, housing costs consume more than 42% of disposable income for tenant households in the bottom quintile of the income distribution. In most countries, low-income tenant households face median housing costs between 20 to 45% of disposable income. The median burden is lowest (20% or less) among tenant households in several Central and Eastern European countries, as well as Ireland, Malta and Portugal. Only in Ireland -- where rental costs consume a relatively small share of income across the income distribution -- do households in the middle quintile face a slightly higher housing cost burden than households in the bottom quintile.
- (2) Among homeowners with a mortgage, in all 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 (Panel B of Figure HC1.2.2). In Canada, Italy, Spain and the United States, the median household in the bottom quintile of the income distribution face mortgage costs of close to or higher than 35% of income. In many Southern European countries, as well as Belgium, Chile, Mexico and the United Kingdom, the median mortgage burden of low-income households is almost 30% or more. In most Central and Eastern European countries, in German-speaking countries, as well as Korea and New Zealand, mortgaged households face relative housing costs lower than 30% of income at the median. At less than one-fifth of disposable income, low-income owner-with-mortgage households face the lowest relative housing costs in the Netherlands and Switzerland.

In Canada, the United States, and several Southern European countries, low-income households have a substantially higher mortgage burden relative to households in the third quintile (Panel B, Figure HC1.2.2). By contrast, in Finland, France, Norway and the Netherlands, owner-with-mortgage households in the bottom and the third quintiles of the income distribution face similar median mortgage burdens.

Various factors can 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 are likely to contribute to these variations across countries and income quintiles (André, 2016; Whitehead and Williams, 2016). In countries with larger social housing sectors, such as France, the burden on low-income tenants may be lower (see the discussion on housing cost overburden among low-income tenants with subsidized rent below, as well as Indicator HM1.3 on tenure).

Mortgage and rent burden

Households that spend more than 40% of disposable income on housing are considered overburdened by housing costs. Figure HC1.2.3 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 the distribution of tenure types across the income distribution).

In Chile, Israel, and New Zealand, more than 50% of tenants (private market rent) are overburdened by housing costs. By contrast, in many Central and Eastern European countries, overburden rates are lower than 25%.

In almost all countries, people living in subsidized 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, the overburden rate among subsidized tenants is 2%, compared to 54% among private market rental tenants. The overburden rate among the low-income population that live in owner-with-mortgage dwellings is highest in New Zealand (43%) and Italy (42%).

Overburden rates among low-income people living in owner-with-mortgage households vary widely across countries. Low-income owner-with-mortgage populations in Finland, the Czech Republic, the Netherlands, Norway and the Slovak republic are the least likely to face a housing cost overburden. In these countries, the overburden rate among the low-income mortgaged population is about or below 10%.

Mortgage and rent burdens are not only an issue for low-income households; overburden rates can still be significant among households with higher incomes. In Finland, Norway, Spain and the United Kingdom, more than 20% of the tenant population (private market rent) are overburdened by housing costs (Figure HC1.2.3.a.). Among the total population servicing a mortgage (regardless of income level), overburden rates vary widely across countries and generally comprise less than 10% of the total population, except in Bulgaria, Greece and Luxembourg (Figure HC1.2.3.a.).

Figure HC1.2.3. Housing cost overburden rate for low-income owners (with mortgage) and tenants (private rent and subsidized rent), in % of the population

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, 2019 or latest year ^{1 2 3}

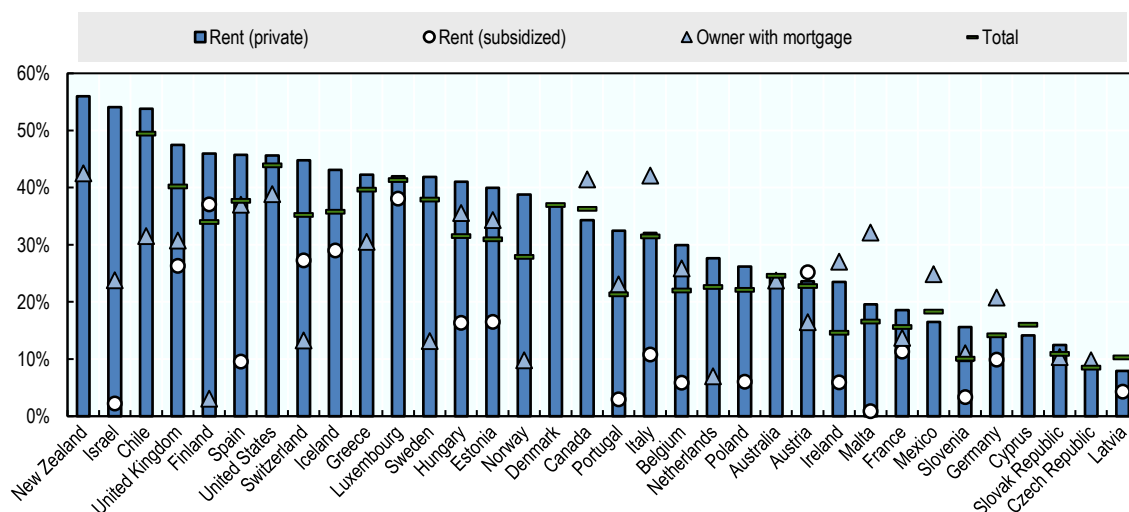
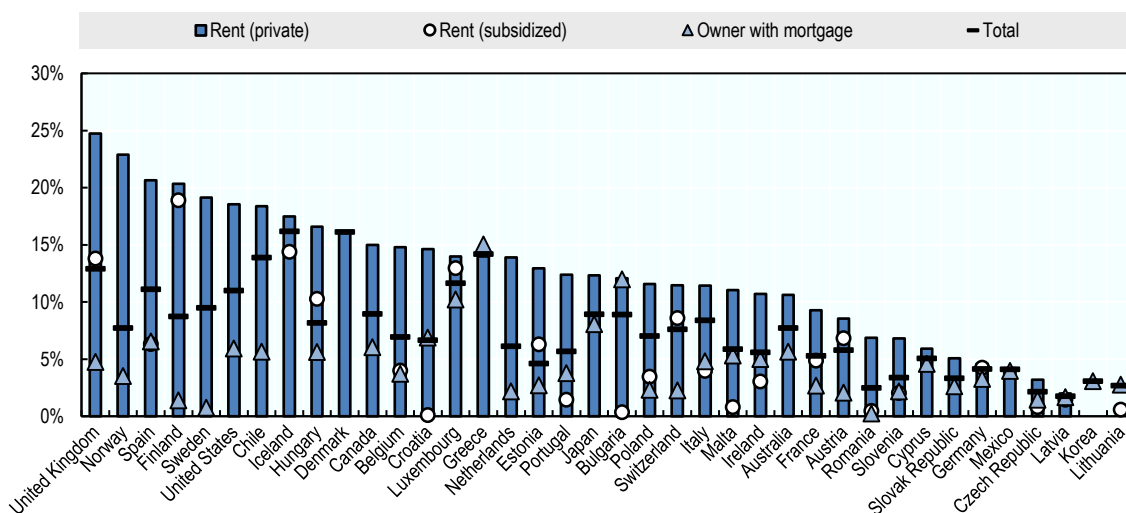


Figure HC1.2.3.a Housing cost overburden rate for owners (with mortgage) and tenants (private rent and subsidized rent)

Share of population spending more than 40% of disposable income on mortgage and rent, by tenure, in percent, 2019 or latest year ^{1 2 3}



Note: 1. In Chile, Mexico, New Zealand, Korea and the United States gross income instead of disposable income is used due to data limitations. No data available on subsidized rent in Australia, Canada, Chile, Mexico and the United States. In the Netherlands, Denmark and Sweden tenants at subsidized rate are included into the private market rent category due to data limitations. No data on mortgage repayments available for Denmark. No distinction available between private or subsidised renters in New Zealand.

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

Source: OECD calculations based on European Union Statistics on Income and Living Conditions (EU SILC) survey 2019 except for Iceland, Ireland, Italy and the United Kingdom (2018); the Household, Income and Labour Dynamics Survey (HILDA) for Australia (2019); the Canada Income Survey (CIS) for Canada (2018); Encuesta de Caracterización Socioeconómica Nacional (CASEN) for Chile (2017); calculations from the Bank of Israel for Israel, the Korean Housing Survey (2012); Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH) for Mexico (2018); Household Expenditure Survey (HES, Stats NZ) for New Zealand (2017); American Community Survey (ACS) for the United States (2019).

Housing costs other than rent and mortgage costs increase the burden on low-income households considerably

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

Across countries, poor households renting at private market rates and households servicing a mortgage both face high overburden rates when total housing costs are taken into account. In many countries, total housing costs exceed 40% of disposable income among more than 60% percent of low-income households (Figure HC2.1.4, and online worksheet HC12.A4 for earlier years and data for other quintiles). Less than half of low-income tenants in the private market are overburdened when total housing costs are taken into account in the Austria, Cyprus, Ireland, Latvia, Malta and the Slovak Republic. Only in France, the Netherlands, Switzerland, and several Nordic countries do less than half of poor households with a mortgage face total housing costs that amount to less than 40% of their disposable income.

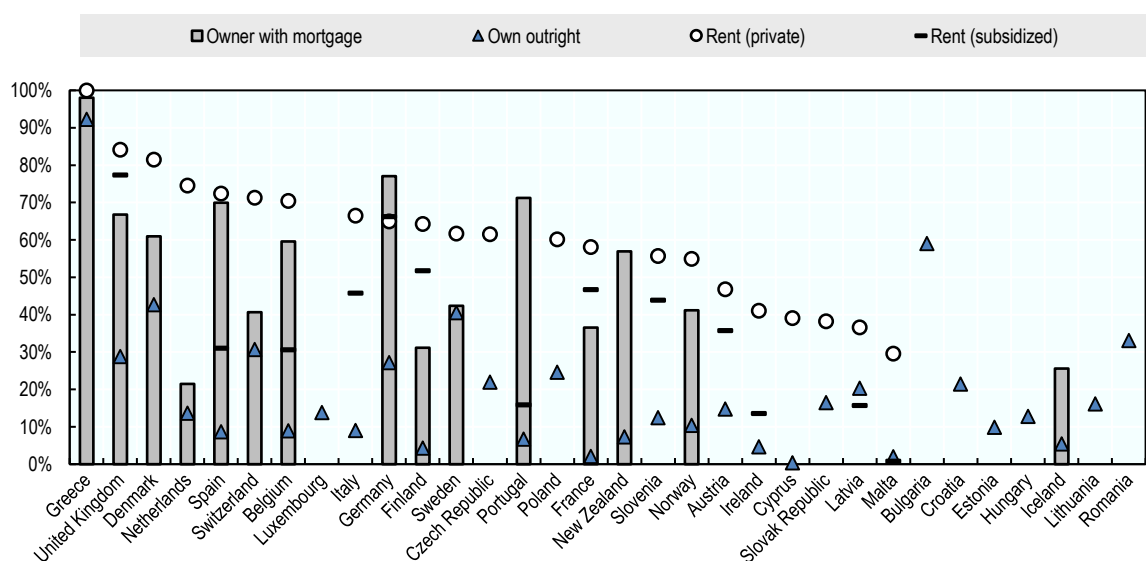
In Germany and Portugal, households servicing a mortgage are more likely to be overburdened by total housing costs than tenants renting in the private market. This has also been observed in some Central and Eastern European countries where rental markets have been traditionally small, ownership is the dominant tenure type and housing quality is often low (see, for example, Norris and Shields [2007]).

In most countries, the total housing cost overburden rate is lower -- often considerably -- among tenants in subsidized housing. In Belgium and Spain, for example, the overburden rate amongst subsidized tenants is less than half the overburden rate amongst tenants in the private rental market (about 30%, compared to 70%). On the other hand, in Austria, France and the United Kingdom, the difference in the overburden rate among tenants in private vs. subsidized rental housing is rather 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 in some countries. For instance, in Bulgaria, 59% of low-income outright-owner households suffer from total housing cost overburden. In Greece, this is as high as 92%.

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, 2019 or latest year available ¹



Note: 1 Data on total housing cost only available for European countries and New Zealand due to data limitations. 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). In the Netherlands and Norway, no tenants at subsidized rate are subsumed into the private market rent category due to data limitations. No data on mortgage repayments available for Denmark. No distinction available between private or subsidised renters in New Zealand.

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. For European countries, the European Statistics on Income and Living Conditions (EU SILC) survey is used, for Canada the Survey of Labour and Income Dynamics (SLID) and Canadian Income Survey (CIS); for Chile the Encuesta de Caracterización Socioeconómica Nacional (CASEN); for Korea the Korean Housing Survey; for Mexico

the Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH); for New Zealand the Household Expenditure Survey (HES, Stats NZ) and for the United States the American Community Survey (ACS). For Japan, the Keio Household Panel Study is used. Data for Japan is sampled on the respondent level and not on the household level.

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 and Iceland.

For Australia, Canada, Chile, Mexico, New Zealand, the United States, Denmark and the Netherlands no information on reduced rent is available due to data limitations (Dewilde, 2015). All types of tenants are included in 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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