

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 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 costs of mandatory services and charges, regular maintenance and repair, taxes and utilities, also referred to as “total housing costs” below. The data presented here are based on household survey microdata and concern national household or population level data.

Key findings

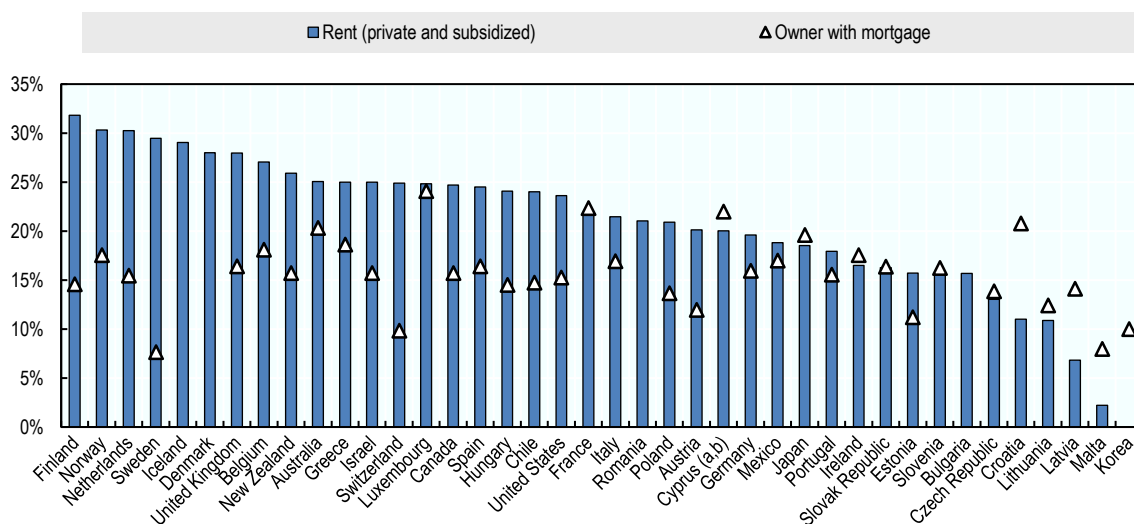
In most countries, median relative housing costs – narrow definition - are higher for tenant households than they are for owner-with-mortgage households (Figure HC1.2.1 and online worksheet HC1.2.A1 for earlier years). Outright owners are not considered here as they do not face mortgage costs (see Figure HC1.2.4 and the discussion below for information on the burden of broader housing costs). The median burden of rent payments for tenant households is highest in the Netherlands (30%), Norway (30%), and Finland (32%). It is often in Central and Eastern European countries, plus also Mexico (19%), Japan (19%), and Ireland (17%) and Malta (below 2%).

Last updated 16/12/2019

Note: 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, 2018 or latest year available

Median mortgage burden (principal repayment and interest payments) or rent burden (private market and subsidized rent) as a share of disposable income, in percent ^{1 2}



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.

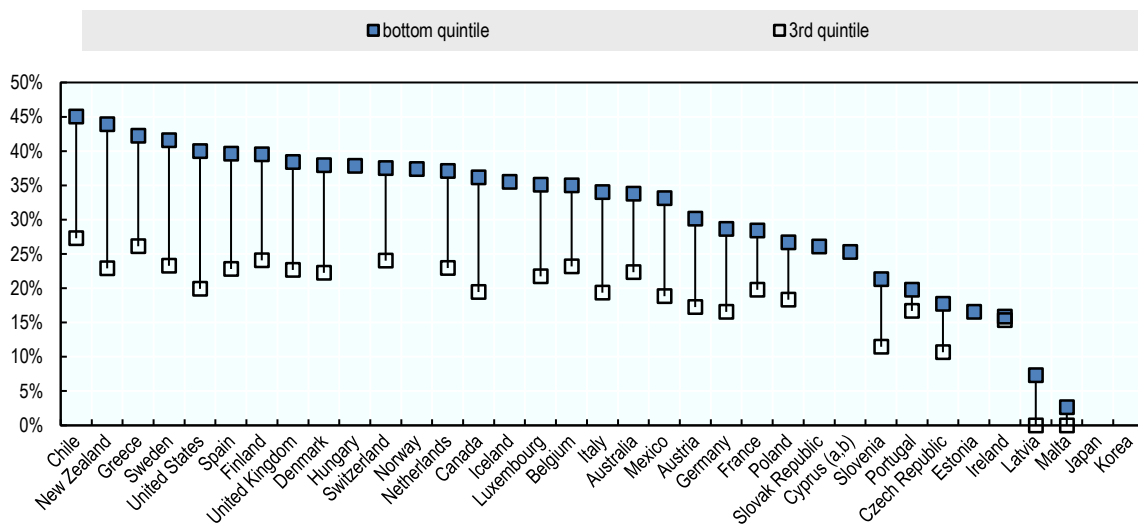
a) Note by Turkey: The information in this document with reference to “Cyprus” relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and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

b) 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 Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

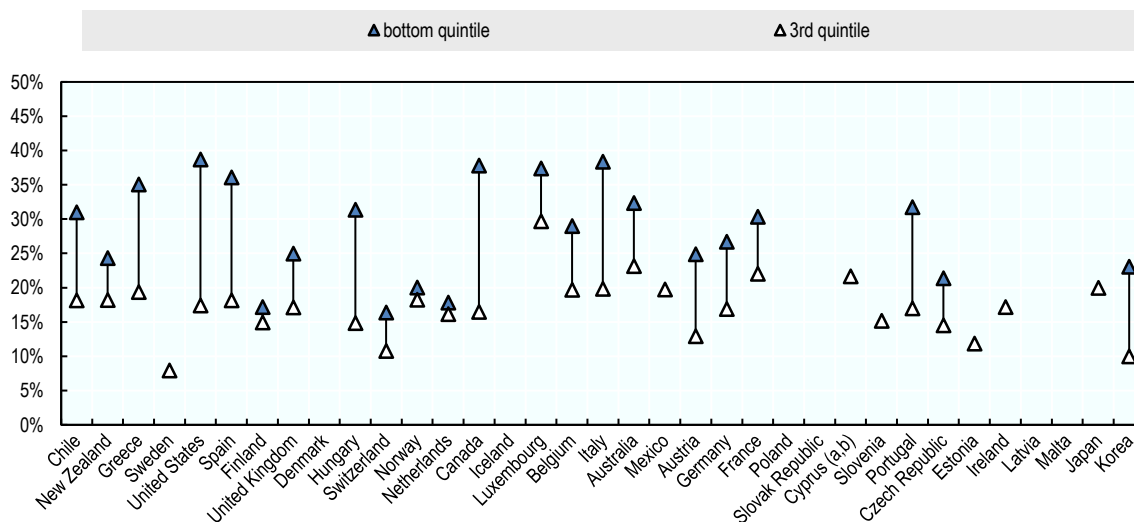
Source: OECD calculations based on European Union Statistics on Income and Living Conditions (EU SILC) survey 2018 except for Ireland, Malta, and the United Kingdom (2017), Iceland and Switzerland (2016) and the Slovak Republic (2015); the Household, Income and Labour Dynamics Survey (HILDA) for Australia (2017); the Canada Income Survey (CIS) for Canada (2016); Encuesta de Caracterización Socioeconómica Nacional (CASEN) for Chile (2017); calculations from the Bank of Israel for Israel (2017); the Korean Housing Survey (2012); Japan Household Panel Study (JHPS) for Japan (2016); Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH) for Mexico (2014); Household Expenditure Survey (HES, Stats NZ) for New Zealand (2017); American Community Survey (ACS) for the United States (2016).

HC1.2.2. Housing cost burden of low- and middle income households as share of disposable income, 2018 or latest year available

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 ^{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 ^{1 2}



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.

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Rental and mortgage cost burdens vary across the income distribution

Housing cost burdens (as based on the narrow definition of rent and mortgage payments) vary considerably across the income distribution and are 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 higher housing cost burdens than their better off peers in the majority of countries (Panel A of Figure HC1.2.2). In Chile, Greece and New Zealand, housing costs consume almost half of disposable income for households in the bottom quintile of the income distribution. In the majority of countries, low-income tenant households face median housing costs between 20 to 45% of disposable income. The median burden is lowest, at 20% or less, for households in several Central and Eastern European countries, plus Ireland Malta and Portugal. Only in Ireland -- where rental costs consume only a relatively small share of income across the income distribution -- do households in the middle quintile confront a burden of similar relative size to households in the bottom quintile.
- (2) 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 and the United States, the median household in the bottom quintile of the income distribution faces mortgage costs of close to 40% of income. In many Southern European countries, plus Australia, Chile, France, and Luxembourg, the median burden of low-income households is between 30% and 40%. In most Central and Eastern European countries, in German speaking countries, Korea, New Zealand, and the United Kingdom, 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.

Countries with substantially higher mortgage burdens on low-income households compared to households in the third quintile include Canada, the United States, and several Southern European countries (Panel B, Figure HC1.2.2). 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). By contrast, in Finland, Norway, the Netherlands and Switzerland, 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. 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 and Indicator HM1.3 on tenure).

Mortgage and rent burden

Households that spend more than 40% of disposable income on housing are considered “overburdened”. Figure HC1.2.3 shows the share of 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, New Zealand, and the United Kingdom, more than 50% of the tenant population (private market rent) are overburdened by housing costs. By contrast, in many Central and Eastern European countries, overburden rates are lower than 25%.

In all countries, people living in subsidised rental dwellings are less likely to be overburdened with housing costs than people living in privately rented dwellings, often by some margin. In Israel for example, the overburden rate among subsidised tenants is 2%, compared to 54% for private market rental tenants. The overburden rate among the low-income population that live in owner-with-mortgage dwellings is highest in Mexico (49%) and New Zealand (43%).

Overburden rates for people living in low-income owner-with-mortgage households vary widely across countries. Low-income owner-with-mortgage populations in the Nordic countries, the Czech Republic, Malta, the Netherlands and Switzerland are the least likely to face housing cost overburden. In these countries, the overburden rate among the low-income mortgaged population is below 15%.

Mortgage and rent burdens are not just an issue for low-income households; overburden rates can still be significant among the total population. In Finland, Iceland, 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 population servicing a mortgage, overburden rates vary widely across countries and are generally less than 10% in total population except in Bulgaria, Croatia, Greece and Luxembourg.

Figure HC1.2.3. Housing cost overburden rate for low-income owners (with mortgage) and tenants (private rent and subsidised rent), in % of the population, 2018 or latest year

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 ^{1 2 3}

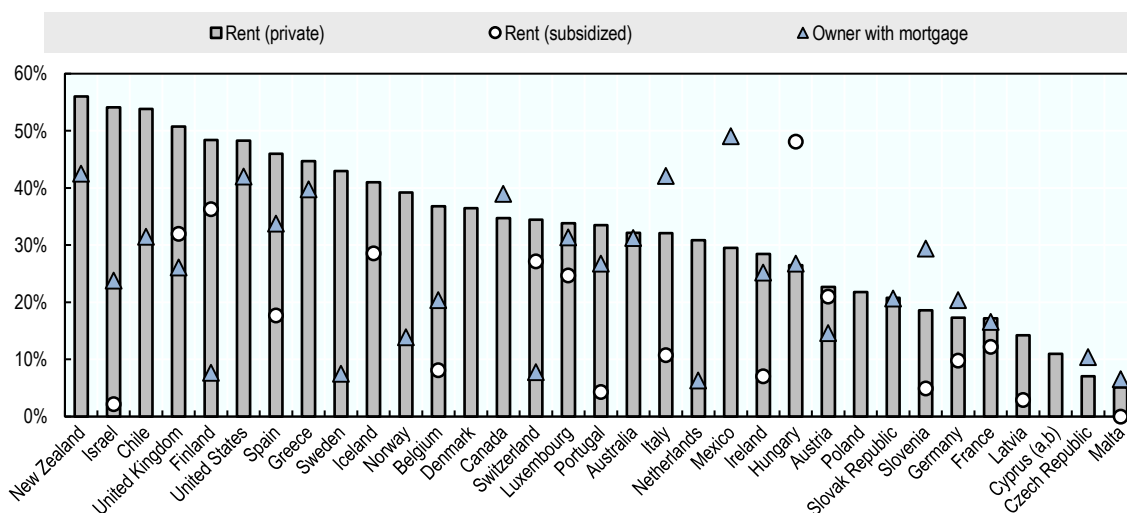
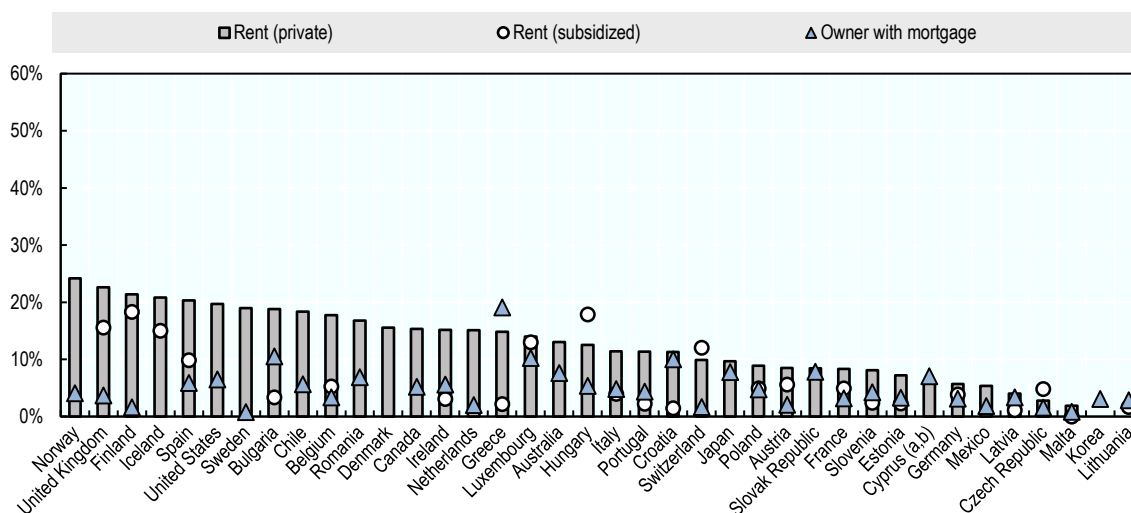


Figure HC1.2.3.a Housing cost overburden rate for owners (with mortgage) and tenants (private rent and subsidized rent), 2018 or latest year

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



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 and Denmark 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.

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

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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. Insurance costs, 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 suffer from high total housing cost overburden rates. In many countries, more than 60% percent of low-income households face total housing costs exceeding 40% of their disposable income

(Figure HC2.1.4, and online worksheet HC12.A4 for earlier years and data for other quintiles). Total housing cost overburden rates for low-income tenant households renting on the private market are below 50% only in the Austria, Cyprus, Latvia, Malta and the Slovak Republic. And only in the Netherlands, Switzerland, and several of the Nordic countries do less than half of poor households with a mortgage face total housing costs of less than 40% of their disposable income.

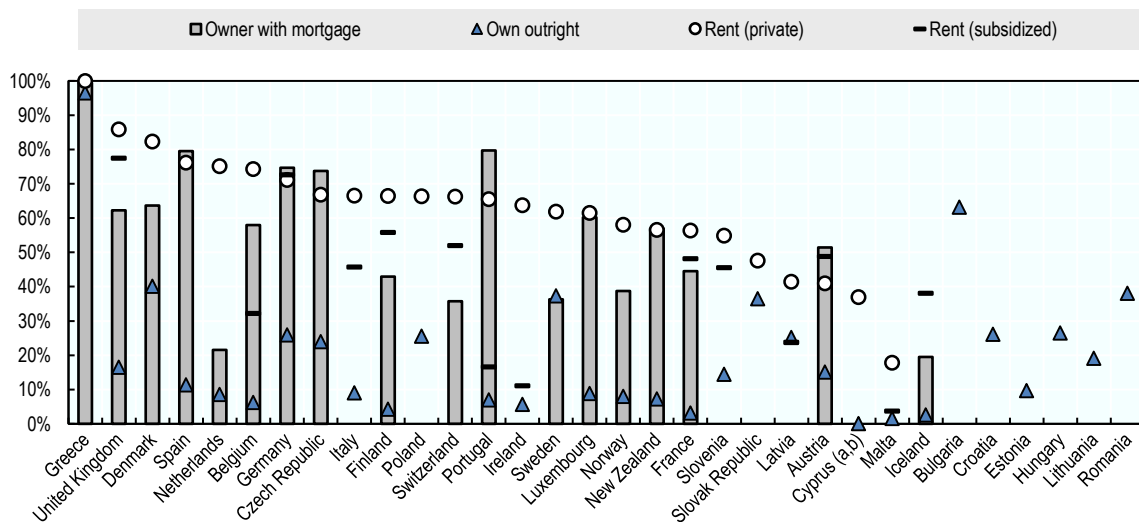
In Austria, the Czech Republic, Germany, Spain and Portugal, households servicing a mortgage are more likely to face total housing cost overburden than tenants renting on the private market. This has also been observed in some Central and Eastern European countries where rental markets have been traditionally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

In most countries, total housing cost overburden rates are lower -- often considerably -- for tenants in subsidized housing. In Belgium, for example, the overburden rate amongst subsidized tenants is less than half the overburden rate amongst tenants in the private rental market (32%, compared to 74%). In Austria, France and the United Kingdom on the other hand, this difference in overburden rates rather small.

As might be expected, total housing cost overburden rates are often lower for poor households that are outright owners of their dwellings. Nevertheless, the overburden rate is still considerable in some countries. For instance, in Bulgaria, 63% of low-income outright-owner households suffer from total housing cost overburden. In Greece, this is as high as 96%.

HC1.2.4. Total housing cost overburden rate among low-income households, by tenure, 2018 or latest year available

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 ¹



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.

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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:

André, C. (2016), "Household debt in OECD countries: Stylised facts and policy issues", *OECD Economics Department Working Papers*, No. 1277, OECD Publishing, Paris. <http://dx.doi.org/10.1787/5jm3xgtkk1f2-en>;

Dewilde, C. (2015): "What Have ECHP and EU-SILC to Contribute to the Comparative Study of Housing?", *Critical Housing Analysis*, Vol. 2 (2), pp. 19-26 and Haffner, M. (2015): "EU-SILC: Should We Make Do with What We Have?", *Critical Housing Analysis*, Vol. 2 (2), pp. 27-34.

Norris, M. and P. Shields (2007): "Housing inequalities in an enlarged European Union: patterns, drivers, implications", *Journal of European Social Policy*, Vol. 17(1), pp. 65–76;

Whitehead, C. and Williams, P. (2016) "Changes in the regulation and control of mortgage markets and access to owner-occupation among younger households" (forthcoming).