# HM1.1. HOUSING STOCK AND CONSTRUCTION

# **Definitions and methodology**

This indicator presents available data on the housing stock and housing construction across OECD and EU countries. Data were collected through the OECD Questionnaire on Social and Affordable Housing, as well as from information available from national statistical institutes.

For the scope of this indicator, by *dwelling stock* or housing stock, we refer to the total number of dwellings in a country. A *dwelling* is "a room or suite of rooms and its accessories in a permanent building or structurally separated part thereof, which by the way it has been built, rebuilt, converted, etc., is intended for private habitation. It should have a separate access to a street (direct or via a garden or grounds) or to a common space within the building (staircase, passage, gallery, etc.)" (OECD, 2001).

A dwelling is considered to be occupied if it provides the usual place of residence to a household, which can include one or more persons. Among dwellings that are not occupied, we define as *vacant dwellings* those that are not: secondary or holiday homes or dwellings meant for seasonal use.

Furthermore, we distinguish between dwellings located in *urban* and *rural* areas. Definitions of what constitutes an urban or rural area vary across countries, and are usually based on the size of locality and/or population density in a given area.

Finally, data on *housing construction* refer to the number of dwellings that were completed during a given year and are ready to be occupied.

#### **Key findings**

Figure HM1.1.1 considers the availability of housing in OECD countries in relation to the population. Additional data, including the total number of dwellings in each country and the number of dwellings per thousand inhabitants, are provided for the years 2011, 2018 and 2020 in Table HM1.1.b in the online worksheet.

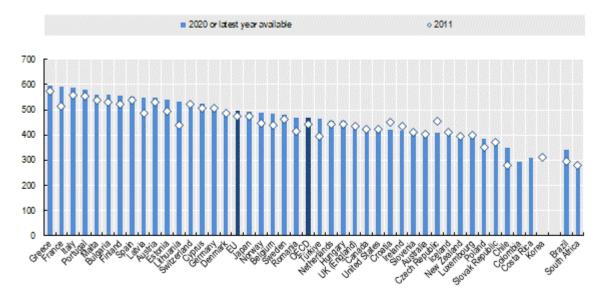
The number of dwellings per thousand inhabitants is around 468, on average, among OECD countries, below the EU average of 495 in 2020. There are considerable differences across countries. The number of dwellings in relation to the population is highest in Greece, France, Italy, Portugal, Bulgaria, Finland, Spain and Latvia (with over 550 dwellings per thousand inhabitants). In contrast, the number of dwellings reported is the lowest in South Africa (283), Colombia (294), Korea (310) and Costa Rica (310).

The number of dwellings per thousand inhabitants increased between 2011 and 2020 in all but six countries: Croatia, Ireland, the Czech Republic, Iceland, New Zealand and Luxembourg. Chile, Lithuania and Türkiye reported the biggest increase in the number of dwellings per thousand inhabitants over this period.

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.

# Figure HM1.1. Dwellings per thousand inhabitants

Total number of dwellings per thousand inhabitants, 2020 or latest year available<sup>1,2</sup>



Notes: 1. Data are for 2020, except for Australia (2018), Brazil (2019), Bulgaria (2017), Canada (2016), Chile (2017), Colombia (2018), Croatia (2013), Cyprus (2018), Czech Republic (2011), Estonia (2019), Finland (2019), France (2019), Germany (2018), Greece (2011), Hungary (2018), Iceland (2019), Ireland (2019), Japan (2018), Korea (2013), Latvia (2017), Lithuania (2019), Malta (2018), New Zealand (2018), Norway (2019), Poland (2019), Romania (2019), Slovenia (2018), the Slovak Republic (2011), South Africa (2016), Spain (2017), Switzerland (2017), the United Kingdom (2019), and the United States (2019). 2. Data are for 2011, except for Finland (2010), Spain (2010), Latvia (2010), Lithuania (2010), Switzerland (2013), Cyprus (2010), Denmark (2010), Japan (2013), Belgium (2010), Romania (2010), Türkiye (2010), the Netherlands (2012), UK (England) (2010), Croatia (2013), Iceland (2010), New Zealand (2010), Poland (2010), Brazil (2010), Costa Rica (2010), Colombia (2015), and Korea (2013). 2. The EU average is calculated based on the following countries: Austria, Belgium, Bulgaria, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Latvia, Lithuania, Luxembourg, the Netherlands, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, United Kingdom (2019 data). This document 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.

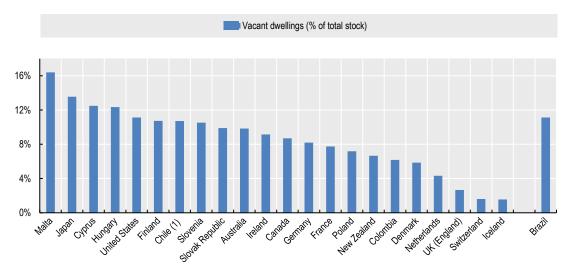
Source: 2021 and 2019 OECD Questionnaire on Affordable and Social Housing, Eurostat (2021), RESH - Structural Housing Indicators - ECB Statistical Data Warehouse (europa.eu) for Italy and Malta.

#### Vacancy rates vary across countries and are generally higher in rural areas

Information on the number of vacant dwellings is only available for some countries. Among those for which data are available, shown in Figure HM1.1.2 (Panel A), Malta, Japan, Cyprus and Hungary record the largest share of vacant dwellings, at over 12%. By contrast, vacancy rates are lowest in Iceland, Switzerland and England (United Kingdom) at less than 3%. Moreover, as shown in Figure HM1.1.2 (Panel B), the share of vacant dwellings is larger in rural areas, compared to urban areas, in all countries except Portugal (though the difference is very small). The biggest differences in vacancy rates between rural and urban areas are recorded in Chile (over 15 percentage points) and the Czech Republic (nearly 12 percentage points).

# Figure HM1.1.2. Vacant dwellings in selected countries

Panel A. Percentage of vacant dwellings out of the total dwelling stock, 2020 or latest year available<sup>1</sup>



Panel B. Percentage of vacant dwellings, out of the total dwellings in urban and in rural areas respectively, 2018 or latest year available<sup>2,3,4</sup>



Note: 1. Chile: Vacant dwellings refers to dwellings for sale, for rent, abandoned, seasonal or others. In the 2019 OECD QuASH, seasonal dwellings were not included (Source: 2021 QuASH).

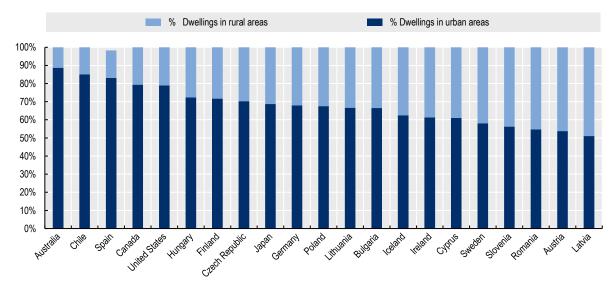
- 2. Panel A: Data are for 2020, except for Australia (2016), Brazil (2015), Canada (2016), Chile (2017), Colombia (2018), Cyprus (2018), Finland (2019), France (2019), Hungary (2016), Iceland (2018), Ireland (2016), Japan (2018), Malta (2018), New Zealand (2018), Poland (2017), Slovak Republic (2018), Slovenia (2018), Switzerland (2018), the United Kingdom (2019), and the United States (2019).
- 3. Panel B: Data are for 2020, except for Australia (2016), Chile (2017), Cyprus (2017), the Czech Republic (2011), Finland (2017), Germany (2011), Greece (2018), Slovenia (2011), Romania (2010), Ireland (2016), Japan (2018), Poland (2010), Portugal (2011), the Slovak Republic (2011), Spain (2011), and the United States (2017).
- 4. The definitions of "urban" and "rural" are not harmonised across OECD countries. For further discussion of such challenges, please see OECD (2012), Redefining Urban: A New Way to Measure Metropolitan Areas.

Source: OECD Questionnaire on Affordable and Social Housing (2021), except for Malta and Slovak Republic, where data refer to RESH-Structural Housing Indicators - ECB Statistical Data Warehouse (europa.eu); and for the UK (England), where data are obtained from the Council Tax Base (CTB statistical release) database. The share of vacant dwellings in the UK (England) in the Figure reflects the CTB estimate for the category "all vacancies" (all tenures), which is closest to the definition of vacancies used for other OECD countries and thus provides the best estimate for international comparison. A previous iteration of this indicator used the CTB estimate for the category "all long-term vacancies" (all tenures), yielding a vacancy rate of 0.93%, which, however, excludes other relevant categories of vacant dwellings (e.g. those that receive council tax exemptions, among others).

Figure HM1.1.3 below shows the distribution of dwellings between urban and rural areas in a number of countries. In all countries for which data are available, a larger share of dwellings is recorded in urban areas, relative to rural areas, although there are considerable differences in the relative shares across countries. The largest share of dwellings in urban areas is recorded in Australia (88%), Chile (85%) and Spain (83%). By contrast, the share of dwellings in urban areas is less than 60% of the total dwelling stock in Sweden (58%), Slovenia (56%), Romania (55%), Austria (54%) and Latvia (51%). The higher rate of urban vs. rural dwellings reflects the higher housing density in cities.

# Figure HM1.1.3. Dwelling stock in urban and rural areas

Percentage of dwellings located in urban and rural areas, 2020 or latest year available 1,2,3



Note: 1. Data are for 2020, except for Australia (2016), Bulgaria (2017), Canada (2011), Chile (2017), Cyprus (2018), the Czech Republic (2011), Finland (2017), Germany (2018), Hungary (2018), Iceland (2019), Ireland (2016), Japan (2018), Latvia (2017), Lithuania (2019), Poland (2019), Romania (2019), Slovenia (2011) Spain (2011), Sweden (2013), and the United States (2019).

Source: OECD Questionnaire on Affordable and Social Housing (2021, 2019).

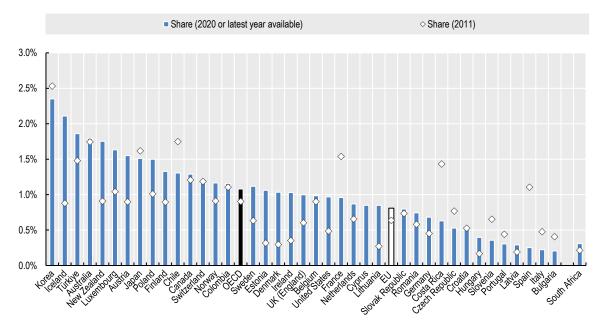
Figure HM1.4 presents data on housing construction, measured as the share of dwellings completed in the year as a percentage of the total existing housing stock. Relative to 2011, construction activity increased, on average, across OECD and EU countries, with the exception of Bulgaria, Chile, the Czech Republic, Japan, Korea, Portugal and Switzerland, and particularly France and Spain. Korea and Iceland recorded the highest rates of new housing construction, with over 2% of the total existing dwelling stock. Türkiye, Australia and New Zealand also recorded relatively high levels, between 1.8% and 1.9% of the total existing dwelling stock. However, in 17 countries, the rate was less than 1%. Historical trend data (see the online worksheet) suggest that the Great Recession sharply reduced new construction – albeit after a prolonged housing boom in Ireland and Spain (see Norris and Byrne, 2015).

<sup>2.</sup> Data refer to the responses as in the 2021 OECD Questionnaire on Affordable and Social Housing (QuASH) except for Latvia and Sweden where they refer to responses as in the 2019 QuASH.

<sup>3.</sup> The definitions of "urban" and "rural" are not harmonised across OECD countries. For further discussion of such challenges, please see OECD (2012), Redefining Urban: A New Way to Measure Metropolitan Areas.

### Figure HM1.1.4. Housing construction over time

Total share of dwellings completed in the year, as a percentage of the total existing housing stock (2020 or latest year available) 1,2,3



Note: 1. Data are for 2020, except for Bulgaria (2017), Canada (2016), Chile (2017), Colombia (2018), Croatia (2013), Cyprus (2018), the Czech Republic (2013), Estonia (2019), Finland (2019), France (2019), Germany (2018), Hungary (2018), Iceland (2019), Ireland (2019), Japan (2018), Korea (2015), Latvia (2017), Lithuania (2019), New Zealand (2018), Norway (2019), Poland (2019), Romania (2019), the Slovak Republic (2015), Slovenia (2018), South Africa (2016), Spain (2017), Switzerland (2017), the United Kingdom (2019), and the United States (2019). Data are for 2011, except for Korea (2013), Iceland (2010), Türkiye (2010), New Zealand (2010), Japan (2013), Poland (2010), Finland (2010), Switzerland (2013), Colombia (2015), Sweden (2017), Denmark (2010), UK - England (2010), the Netherlands (2012), Lithuania (2010), Romania (2010), Croatia (2013), Latvia (2010), Spain (2010), and Costa Rica (2010).

- 2. Data for 2011 and 2020 refer to the responses as in the 2021 OECD Questionnaire on Affordable and Social Housing (QuASH), except for Korea, the Czech Republic, the Slovak Republic and South Africa where they refer to responses as in the 2019 and 2016 QuASH.
- 3. The document 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 Questionnaire on Affordable and Social Housing (2021, 2019) except for Belgium and Italy where data refer to RESH - Structural Housing Indicators - ECB Statistical Data Warehouse (europa.eu).

#### Data and comparability issues

Data on the stock of dwellings are mainly drawn from statistics at national level, which limits comparability in different ways. First, data are not available for the same reference year(s) across countries, and data are not always up to date. While some countries rely on regular housing surveys, others provide data from the general Population and Housing Census, which is typically carried out every five to ten years. Further, national definitions do not always allow for cross-country comparison. For example, this applies to the distinction between unoccupied dwellings (including those which are only temporarily vacant, such as second homes) and vacant dwellings (which should include only long-term vacant homes). In practice, some countries may include second homes as vacant, resulting in elevated vacancy rates. Even among dwellings categorised as vacant comparability is limited, as in some countries dwellings left unoccupied due to e.g., the tenant/owner being in prison or a care facility or the dwelling requiring major repair work are included in the counts, while in other countries they are not captured. This is also true for the definitions of urban and rural areas, which differ across countries.

For further discussion of such challenges, please see OECD (2012), *Redefining Urban: A New Way to Measure Metropolitan Areas.* 

### Sources and further reading

- European Central Bank, RESH Structural Housing Indicators ECB Statistical Data Warehouse (europa.eu).
- European Statistical System, Census Hub website <a href="https://ec.europa.eu/CensusHub2/query.do?step=selectHyperCube&qhc=false.">https://ec.europa.eu/CensusHub2/query.do?step=selectHyperCube&qhc=false.</a>
- Eurostat (2015), People in the EU: who are we and how do we live?, Publications Office of the European Union, Luxembourg. <a href="http://ec.europa.eu/eurostat/documents/3217494/7089681/KS-04-15-567-EN-N.pdf/8b2459fe-0e4e-4bb7-bca7-7522999c3bfd">http://ec.europa.eu/eurostat/documents/3217494/7089681/KS-04-15-567-EN-N.pdf/8b2459fe-0e4e-4bb7-bca7-7522999c3bfd</a>.
- Norris, M. and M. Byrne (2015), "Asset Price Keynesianism, Regional Imbalances and the Irish and Spanish Housing Booms and Busts", Geary Institute Working Papers, No. WP2015/14, UCD Geary Institute for Public Policy, http://hdl.handle.net/10197/6872.
- OECD (2001), OECD Glossary of Statistical Terms Dwelling UN Definition, <a href="https://stats.oecd.org/glossary/detail.asp?ID=695">https://stats.oecd.org/glossary/detail.asp?ID=695</a>.
- OECD (2012), *Redefining Urban: A New Way to Measure Metropolitan Areas*, OECD, Paris. <a href="https://www.oecd.org/regional/regional-policy/redefining-urban-9789264174108-en.htm">https://www.oecd.org/regional/regional-policy/redefining-urban-9789264174108-en.htm</a>.
- UNSTATS, Housing Statistics, <a href="https://unstats.un.org/unsd/demographic-social/sconcerns/housing/index.cshtml">https://unstats.un.org/unsd/demographic-social/sconcerns/housing/index.cshtml</a>.