

HM1.2 HOUSE PRICES

Definitions and methodology

House prices capture the financial burden of purchasing a dwelling and their development over time is measured by a (real) house price index; the evolution of rental prices can be monitored over time by the (real) rent price index. Alternatively, house prices are compared to income (price-to-income ratio) to measure the affordability of owning a dwelling. If the price-to-income ratio is above (below) their long-term average, house prices are considered to be overvalued (undervalued).

Estimates on house price levels per square metre per country have been taken from the *Houselev dataset* (see below) which uses information on the total value of dwellings in the national accounts and on total floor areas of existing dwelling stocks from census statistics, or information from real estate agents (see below). The national estimates per square meter mask the variation in housing prices across tenures, as well as within countries, regions and cities.

Key findings

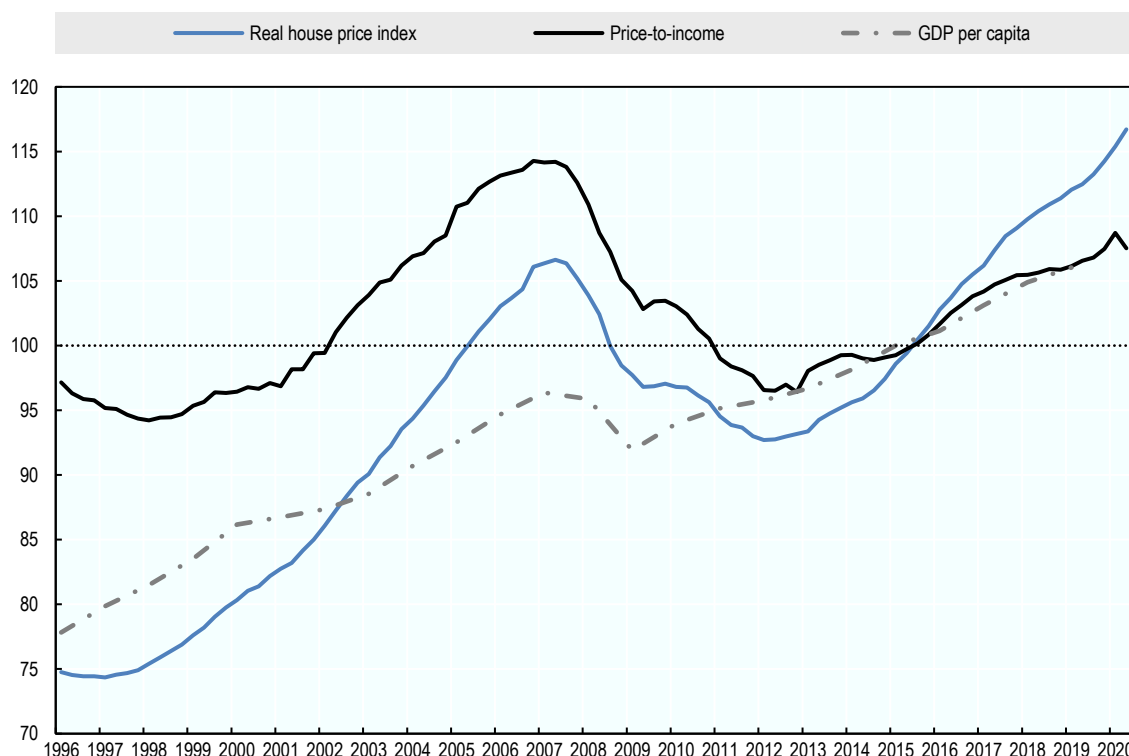
Considering developments since 2015, the real house price index on average across the OECD area as a whole has risen to 116.7 index points in the second quarter of 2020 (Figure HM1.2.1, also see OECD, 2019a; OECD, 2019b). Over the same period, GDP per capita on average across the OECD also increased, but not as fast. The price-to-income ratio brings together the developments of house prices and income. This ratio has increased by 7.5 index points above the base value since 2015 across the OECD on average.

The OECD area average hides wide disparities across countries, however. Based on the evolution since 2015 of the price-to-income ratio as the main indicator for affordability OECD countries can be broadly grouped in four categories (for countries where data available; see the online worksheet HM1.2.1 for country-specific results through Q4/2018 (European countries) and Q1/2019):

1. Price-to-income ratio within +/- 10 index point of the base value (100): House prices, incomes and price-to-income ratio have remained broadly stable since 2015 in Belgium, Chile, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Japan, Korea, Latvia, Lithuania, Poland, the Slovak Republic, Switzerland, the United Kingdom and the United States.
2. Steady increase in price-to-income ratios above 110 index points: In Austria, Canada, the Czech Republic, Ireland, Luxembourg, the Netherlands and New Zealand.
3. Price-to-income ratio initially rising by more than 10 index points, but falling thereafter to above 100 index points: Australia, Israel, Norway, Sweden.
4. Price-to-income ratio initially rising by more than 10 index points, but falling thereafter to below 100 index points: in Turkey, it initially rises to 109.52 index points in the third quarter of 2016, but since then falls to 88.60 index points in the first quarter of 2019.

Figure HM1.2.1: Development of house prices, OECD average, 1996-2020

Real house prices, price-to-income ratio and GDP per capita indexed to 2015

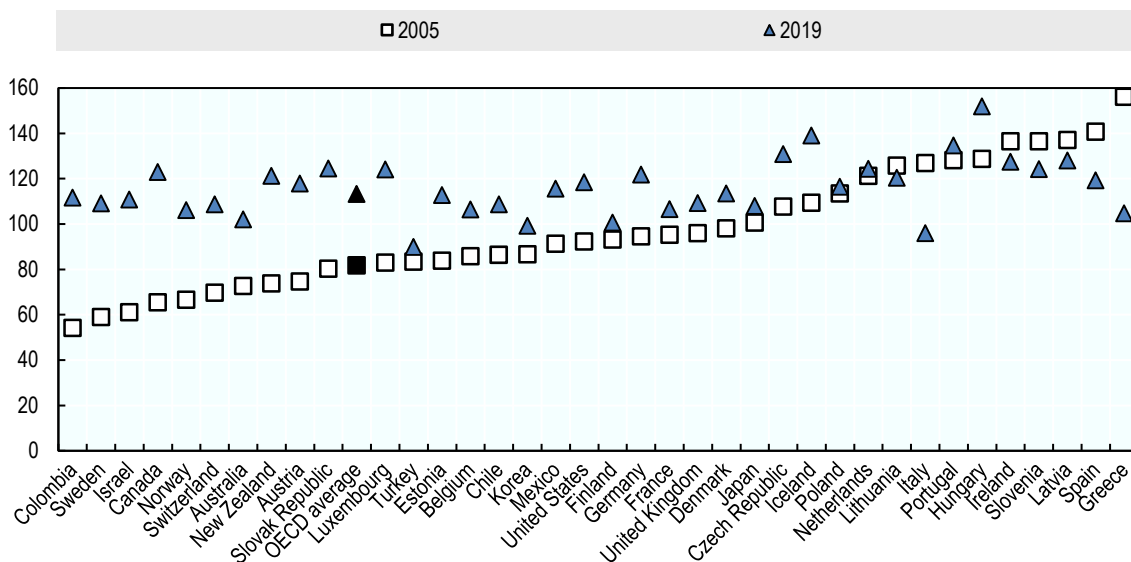


Source: OECD Analytical House Price Database.

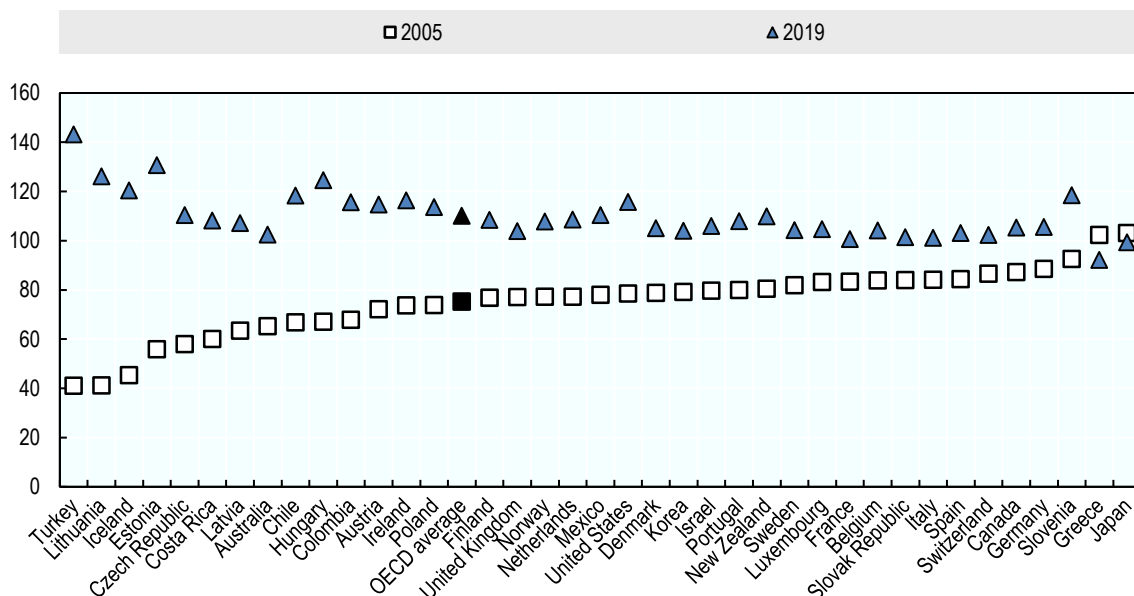
Housing prices have increased over the past two decades, especially for renters. This can at least partly explain increased household spending on housing. On average, real house prices increased in 31 OECD countries between 2005 and 2019, with Colombia, Canada, Sweden and Israel recording the largest increases (over 80%) over this period (Figure HM1.2.2 – Panel A). Eight OECD countries recorded a drop in real house prices over this period, most significantly in Greece, Italy and Spain. The evolution of rent prices across the OECD over this period features more uniform trends, with rent prices increasing in all but two OECD countries between 2005 and 2019 (Figure HM1.2.2 – Panel B). Turkey, Lithuania, Iceland and Estonia recorded the largest increases (e.g. over 100%) over this period. Japan and Greece were the only two countries that saw a drop in real rent prices since 2005; however, in Greece, the drop in rent prices was nonetheless much smaller than that of real house prices (10% vs. 33% drop). High and rising rent prices also make it harder for tenants to save up for a down payment to purchase a home.

HM1.2.2. House prices increased in many OECD countries for homeowners and renters between 2005 and 2019

A. Real house price index, 2005 and 2019, 2015=100.



B. Rent price index, 2005 and 2019, 2015=100,



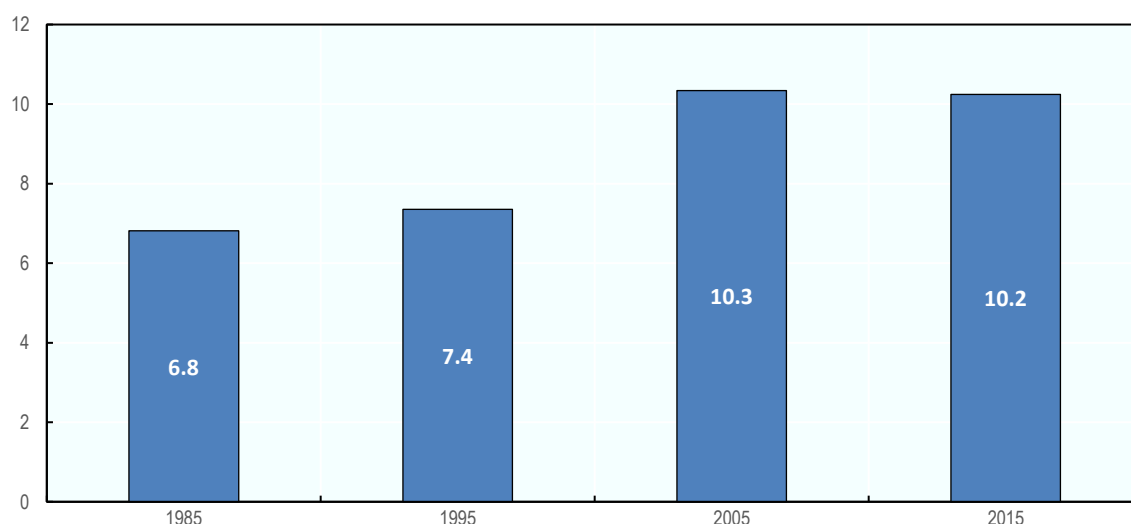
Note: 1. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law. 2. House price indices, also called Residential Property Prices Indices (RPPIs), are index numbers measuring the rate at which the prices of all residential properties (flats, detached houses, terraced houses, etc.) purchased by households are changing over time. Both new and existing dwellings are covered if available, regardless of their final use and their previous owners. Only market prices are considered. They include the price of the land on which residential buildings are located (see (OECD et al., 2013_[6])). For Panel A, 2005 data were not available in several countries; as such, data for the nearest available year were used: Latvia and Lithuania (2006), Luxembourg (2007), the Czech Republic (2008), Poland (2010) and Hungary (2007). 2019 data were not available in several countries; as such, data for 2018 were used: Chile, Colombia and New Zealand. Real house price data for Costa Rica were not available.

Source: Calculations based on OECD Housing prices (indicator), <https://dx.doi.org/10.1787/63008438-en> (accessed December 2020).

The rising cost of housing means that young families with children – even those with median income levels – are finding it increasingly difficult to afford quality housing, including purchasing a home. Based on price data from capital cities across the OECD, OECD (2019) finds that a median-income couple with two children must spend significantly more to purchase a modest-sized flat than they would have 30 years ago, putting increasing pressures on household budgets and making home ownership less accessible to young families today relative to previous generations (Figure HM1.2.3). At the same time, real interest rates have fallen considerably since 1985, moderating somewhat the impact of house price increases on housing costs.

Figure HM1.2.3: Today's families must pay considerably more to buy a flat than previous generations.

Number of years of annual income needed to buy a 60 square meter flat in the country's capital city or financial centre, for a median income couple with two children

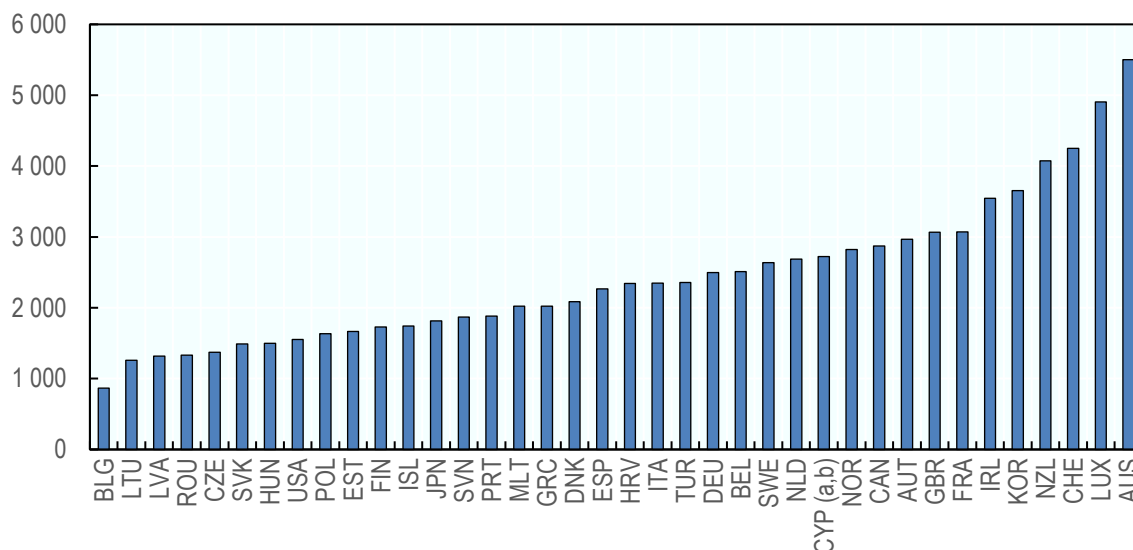


Note: Households included here concern couples with two children at median income levels. The OECD average includes Australia, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Israel, Italy, the Netherlands, Norway, Sweden, Switzerland, the United Kingdom and the United States.

Source: OECD (2019), *Under Pressure: The Squeezed Middle Class*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/689afed1-en>. OECD Secretariat calculations based on data from EU-SILC (Europe), SLID and CIS (Canada), CPS March Supplement (United States) and LIS Data Center: Global Property Guide; OECD Residential Property Prices Indices (RPPIs)

There are large variations across countries in term of average of house dwellings price per square metre (Figure HM1.2.4:), ranging on average from less than 1500 USD PPP in Bulgaria, Lithuania, Latvia, Romania, the Czech Republic and the Slovak Republic to more than 4000 USD PPP in New Zealand, Switzerland, Luxembourg and Australia.

HM1.2.4. Price level estimates in HouseLev: prices per square metre in 2016 US PPP



Note: a) 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". b) 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.

Purchasing power parity (national currency divided by PPP index using implied conversion rate compared to the US -US:PPP=1)

Source: Assessing House Prices: Insights from "Houselev", a Dataset of Price Level Estimates, 26 July 2019, Jean-Charles Bricongne-Alessandro Turrini-Peter Pontuch, Economic and Financial Affairs, Identification, Discussion Paper 101 (see further reading section below).

National house price indices are based on house prices from across the entire country. However, national house price indices may mask considerable variation in regional house price levels. The OECD will begin collecting regional house price data in 2020.

Data and comparability issues

The items in this indicator that reflect historical trends are (in part) based on national house price indices. The OECD Analytical House Price Database shows *indices* of residential property prices over time, including rent prices, real and nominal house prices, and the price-to-rent ratio and the price-to-income ratio. In most cases, the nominal house price covers the sale of newly-built and existing dwellings, following the recommendations from the RPPI (Residential Property Prices Indices) manual. The real house price is given by the ratio of the nominal price to the consumers expenditure deflator in each country, both seasonally adjusted, from the OECD national accounts database. The price-to-income ratio is the nominal house price divided by the nominal disposable income per head and can be considered as a measure of affordability. The price-to-rent ratio is the nominal house price divided by the rent price and can be considered as a measure of the profitability of house ownership. This indicator is an index with base year 2015.

A comparison of nominal house prices levels across countries is difficult as definitions differ across countries. For example, the level of house prices may refer to different entities (dwellings as opposed to square meters, for example), to different types of dwellings and different periodicity (monthly, quarterly, semi-annual, annual).

The price level estimates per square metre presented here have been taken from the *Houselev* Dataset (see below for the link). *Houselev* is dataset that covers 40 countries and includes estimates for house prices in levels. These estimates are based on information on the total value of dwellings in the national accounts and on total floor areas of existing dwelling stocks from census statistics. For the countries for which such information is not available, price level estimates are based on information from real estate agents.

Sources and further reading:

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https://ec.europa.eu/info/publications/assessing-house-prices-insights-houselev-dataset-price-level-estimates_en |