

GB – United Kingdom

The Department of Communities and Local Government produces a nationwide house price index for all types of dwellings, new and existing (Table 590, 592). Nationwide refers to the United Kingdom of Great Britain and Northern Ireland. The index is constructed using the mix-adjusted method. Dwellings are grouped based on age, location, and type of dwelling. The average price for each group is determined by completed mortgages. The groups are then weighted according to the number of transactions over the previous three years, using a Laspeyres index. Sales data is gathered from the Land Registry. Weights are recalculated every year, so the index is annually chained linked.

Currently, data is collected from banks and building societies through the Regulated Mortgage Survey. Prior to 1992, survey participants only included building societies. This was extended as larger building societies converted into banks. The current index represents all completed mortgages of survey participants. Prior to 2005, participants did not report 100% of mortgage completions. A 5% representative sample was submitted until 2001. Select lenders then started reporting all completions, which were incorporated in the index starting in 2003. Since the second quarter of 2002, the quarterly index is calculated from the average of the monthly mix-adjusted series. Data is reported quarterly going back to the second quarter of 1968.

In 2012 the production of the house price series was transferred to the Office of National Statistics (ONS). The house price series is not seasonally-adjusted by the source. We seasonally-adjust the series using the BSTS model and re-base it to 2005=100. We deflate this house price series using the Personal Consumption Expenditure (PCE) deflator obtained from the OECD Economic Outlook database.

We complete the United Kingdom data by including Personal disposable income (PDI) series reported on a *per capita* basis. We created a net household disposable income series using the gross household disposable income series from the OECD Economic Outlook database less an extended consumption of fixed capital from the IMF International Financial Statistics (IFS) database. The working age population series was obtained from the OECD Economic Outlook database. The source of the current household disposable income and working age population data changed, affecting the PDI *per capita* series in the 2012 first quarter update and all subsequent updates. Gross disposable income for households is obtained now directly from the United Kingdom's Office of National Statistics. The series is reported at a quarterly frequency beginning in the first quarter of 1955. Consumption of fixed capital for households was also obtained from the United Kingdom's Office of National Statistics. This series is annual and begins in 1948. We interpolated this annual series to a quarterly frequency, using the quadratic-match average method. We subtracted the interpolated consumption of fixed capital series from the gross disposable income series to create PDI.

Since the consumption of fixed capital series was released annually, at least four quarters would elapse if we waited for the official data publication. To avoid this lag and make the public release of the data timelier, we nowcasted the annual series one year ahead using the BSTS model to add one extra observation that could be jointly interpolated. The quarterly estimates obtained using

interpolated nowcasts were subsequently replaced as the official annual data became publicly available.

The source of the consumption of fixed capital data has changed again. Starting in 1999, the PDI series is constructed using quarterly consumption of fixed capital data from Eurostat. This affects the 2014 second quarter release and all subsequent updates. We use the interpolated consumption of fixed capital series from the ONS to extend the data back to 1975.

Current working age population data is now obtained from the OECD Main Economic Indicators database. It is reported at a quarterly frequency and begins in the second quarter of 1999. We use the quarterly growth rates of the discontinued working age population series from the OECD Outlook 90 database to extend the series to the first quarter of 1975. We divide the net PDI by the quarterly working-age population series, producing a nominal PDI series in *per capita* terms. We use the PCE deflator to express the series in real terms. Both nominal and real PDI measures are indexed to 2005=100.

Information Resources:

Department of Communities and Local Government Data

<https://www.gov.uk/housing-market-and-house-price-information-notes-and-definitions>

Office for National Statistics (ONS) Data

<http://www.ons.gov.uk/ons/datasets-and-tables/index.html>

Eurostat Data

http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database