

PT – Portugal

The Bank for International Settlements (BIS) produces a monthly house price index starting in 1988. The index includes all residential dwellings, priced per square meter. We splice the residential property price index with the growth rates of the Construção de habitação annual historical index series of building permits for family houses from Statistics Portugal to extend the BIS series to 1975. We first interpolate the series to a quarterly frequency before using the growth rates to splice the two series. We then seasonally-adjust the house price series using the BSTS model, and re-base to 2005=100. Finally, to get the real house price series, we deflate the nominal series using the Personal Consumption Expenditure (PCE) deflator.

To construct the PCE deflator, we use the quarterly PCE deflator obtained from the OECD National Accounts database, which started in 1995. To extend this series, we use the growth rates from the OECD Economic Outlook database, which spans from 1960 to present, to extend the series to 1975. We seasonally-adjust the spliced series using the BSTS model and re-base it to 2005=100.

We complete the Portuguese data by including a personal disposable income (PDI) series, reported in *per capita* terms. To create the PDI *per capita* series we divide household disposable income by the working-age population. Gross disposable income and consumption of fixed capital data are obtained through Eurostat. Both series are reported at a quarterly frequency and begin in 1999. Consumption of fixed capital is subtracted from the gross disposable income series to produce PDI. We seasonalize the series using the BSTS model to remove the seasonal and volatility components of the data.

To extend the PDI series back to 1975, we use Portugal's household disposable income series from the OECD Outlook 70 database, which is reported at an annual frequency. We interpolate to a quarterly frequency using the quadratic-match average method and use the resulting growth rates to extend the series. Working-age population data is obtained from the OECD Main Economic Indicators database. It is reported at a quarterly frequency and begins in the first quarter of 1998. We interpolate the annual series from the OECD Economic Outlook database to a quarterly frequency using the quadratic-match average method and use the subsequent growth rates to extend the series back to 1975. We divide the spliced PDI series to obtain a nominal *per capita* series. We then use the PCE deflator to express the PDI *per capita* series in real terms, and both the nominal and real PDI measures are re-based to 2005=100.

Information Resources:

Bank for International Settlements Data:

[Portugal - Residential property price index, all dwellings, whole country \(bis.org\)](https://bis.org/pt/press/2017/01/170101.htm)

Eurostat Data:

[Statistics | Eurostat \(europa.eu\)](https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&code=sdg_10_10_1)

Population Data:

[Short-Term Labour Market Statistics \(oecd.org\)](https://data.oecd.org/lm/short-term-labour-market-statistics/)

Statistics Portugal Data:

[Statistics Portugal - Web Portal](https://www.inec.pt/)