🇫🇮 FI – Finland

Statistics Finland publishes a nationwide house price index for existing, single-family dwellings. Price data is collected from asset transfer statements that are compiled by the National Board of Taxes. The data that is first published for a given quarter is preliminary and represents approximately two thirds of the total transactions for that period, though coverage varies by area. This data is revised with the publication of the following quarter. Prices are expressed on a per-square meter basis and quoted in euros. Data prior to 1999 has been converted to Euros using the irrevocable exchange rate of 5.94573 Finnish markka per euro. A dwelling refers to a room or suite of rooms that is equipped with a kitchen, kitchenette or cooking area and is intended for year-round habitation. An existing dwelling refers to a dwelling that has been completed prior to one year before the examined year. A price index on new dwellings did not become available until 2005.

Statistics Finland combines hedonic and mix-adjusted methods. The mix-adjustment method cannot control for all changes in the quality of dwellings sold. Quality adjustments are achieved by grouping dwellings by similar characteristics, but adding groups causes the number of observations to decline. Hedonic regressions can be used with a broad based grouping of dwellings to control for the varying dwelling characteristics that remain. Dwellings are first grouped by type, number of rooms and location, as these characteristics are thought to be the biggest determinants of price. A hedonic regression is then used to estimate the price index of each group, with the base period of 1985 used as a reference for dwelling characteristics. Each index is then weighted by the value of the dwelling stock. Data for the dwelling stock is obtained through the Population Register Centre's register of buildings and dwellings.

The time series was revised retrospectively from the beginning of 2005 to take into account the changes in municipalities that took place in 2009. Improvements in the management of registers also contributed to an increase in the number of dwelling transactions used in the statistics since 2005. The index is reported at a quarterly frequency and begins in the first quarter of 1985.

To extend the series, we use the nationwide house price index for existing apartments (flats) per square meter. This index is also produced by Statistics Finland, using the same hedonic and mix-adjusted method; however, the base year for this index is 1970. Also, all prices from 1970 to 1986 (including the index on single-family houses) are based on information from real estate agents, which lacks the classification detail that the tax statements offer. Starting in 1987, all price data is based on tax transfer statements. Prices are expressed on a per-square meter basis and quoted in Euros. Data prior to 1999 has been converted to Euros using the irrevocable exchange rate of 5.94573 markka per euro. We splice the single-family dwelling series with the growth rates of the series for existing flats to extend the series back to the first quarter of 1975.

The house price series are not seasonally-adjusted by the source. We seasonally-adjust the spliced 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.

International House Price Database
www.dallasfed.org/institute/houseprice/index.cfm
Where house prices live.

We complete the Finnish data with data on Personal disposable income (PDI) reported in *per capita* terms. We used the interpolated PDI and working-age population from the OECD Economic Outlook database. The source of the current PDI and working age population data has changed, affecting the PDI *per capita* series in the 2012 first quarter update and all subsequent updates. Gross disposable income and consumption of fixed capital for households is collected from Eurostat. Both series are reported at a quarterly frequency and begin in 1999. Consumption of fixed capital is subtracted from gross disposable income series to produce PDI. The series is largely influenced by seasonal factors, so we use the BSTS model in state-space form to identify and systematically extract the seasonal and excessively volatile components of the data.

To extend the PDI series to 1975 we use the net disposable income series from Statistics Finland, which is reported at an annual frequency. We interpolate to a quarterly frequency using the quadratic-match average method. The resulting quarterly growth rates are used to extend the series. 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 first quarter of 1998. 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 PDI series by the quarterly working-age population series to create the nominal PDI *per capita* series. We use the PCE deflator to report the PDI *per capita* in real terms. Both nominal and real PDI measures are re-based to 2005=100.

References:

Saarnio (2006): "Housing Price Statistics at Statistics Finland."

Information Resources:

Statistics Finland Data
http://www.stat.fi/til/ashi/2011/02/ashi_2011_02_2011-07-29_laa_001_en.html#2.Methodologicaldescription

Statistics Finland Data
http://193.166.171.75/database/StatFin/kan/vtp/vtp_en.asp

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

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