

VI History of the CPI in Japan

Calculation of the Consumer Price Index (CPI) was started in August 1946. The index in those days was calculated using Fisher's formula, with its reference period of somewhat irregular 8-month duration from August 1946 to March 1947 in order to meet the urgent need for measuring the postwar price hike. In addition, to cope with the existence of dual price channels, official and black market, the index was calculated using the "effective prices" (average prices weighted according to the quantity of the goods purchased at official prices and that of goods purchased at black market prices), and weights, which were based on the Consumer Price Survey (CPS). Thereafter, as more detailed data for the CPS became available, the 1st revision was made in August 1949, with the calendar year 1948 as the reference period, and at the same time the index formula was changed to Laspeyres type, with earlier series being recalculated retroactively to August 1946. As the economic situation became stable, the Retail Price Survey (RPS) was started from June 1950. Accordingly, in September 1952, the reference period of the index was changed to the calendar year of 1951, and the effective prices were changed to retail prices obtained from the RPS. As a result, index calculation became more complete. In and after 1955, the base periods have been revised every five years, so as to take account of the changes in consumption patterns.

For the period until the 1948-base, only two series of indices were calculated, namely those for "all cities" and for the "Ku-area of Tokyo". Following the change to the 1951-base, the indices were calculated, besides the above-mentioned two series, for 27 cities where the RPS and the FIES were conducted, bringing the total of the 29 series. Then, with the enlargement of the coverage of the RPS and the FIES from urban areas to the whole country, including rural areas in July 1962, a total of 68 series were compiled on the 1965-base, consisting of the indices for Japan, city groups, districts and Cities with Prefectural Governments. Following the change to the 1975-base, the indices were added for the municipalities in Okinawa prefecture, as it was reverted to Japan in 1972 and included in the national average, making the total of the index series up to 72.

Although the index items had been classified into 5 major groups since the calculation of the CPI began, the 1980-base indices were compiled on the basis of a new classification system, i.e. a 10 major expenditure group system in accordance with the revision of the income and expenditure classification system used for the FIES in 1981.

The calculation of the index for "imputed rent" was started following the change to the 1970-base, and the "all items index including imputed rent" was calculated as a reference index series. Since the 1985-base revision, "all items, including imputed rent," has been used as the "all items" index, and "all items, less imputed rent" is treated as the analytical series of the basic classification index.

Since the 2000-base revision, target households for weighting were changed to that composed of two or more persons including agricultural, forestry and fisheries households. In addition, for some items like personal computers, price indices were calculated by the hedonic approach, using scanner data on prices, quantities and other characteristics of all products provided by the POS information. Moreover, the "Index for Total households," which used the weight on total households including one-person households, was compiled as reference index.

For further information, please refer to "VI Detail History of the CPI in Japan" (<http://www.stat.go.jp/data/cpi/2020/kaisetsu/pdf/6.pdf>) (available only in Japanese).