

# Denmark

## A: Identification

**Title of the CPI:** Consumer Price Index

**Organisation responsible:** Statistics Denmark

**Periodicity:** Monthly

**Index reference period:** 2000 = 100

**Weights reference period:** 2003 weights of the consumer groups in the national accounts combined with a household budget survey.

**Main uses of CPI:** Indexation of wages, pensions and/or social security payment, indexation of rents, contracts and/or other payments and main inflation indicator used for monetary policy.

## B: CPI Coverage

### Geographical Coverage

*Weights:* Nation-wide

*Price collection:* Nation-wide

**Population coverage:** Resident households of nationals and temporary visitors.

**Consumption expenditure excludes:**

- Life insurance premiums;
- Gambling expenditure, gross of winnings

## C: Concepts, definitions, classifications and weights

**Definition of the CPI and its objectives:** The CPI is a fixed weight index. The weights are updated every 4 or 5 years and the index is chained to ensure a coherent time series.

**Definition of consumption expenditures:** Household final monetary consumption expenditure.

**Classification:** COICOP (Classification of individual consumption by purpose)

**Sources of weights:** Household expenditure surveys and national accounts.

**Frequency of weight updates:** Above 5 years

## D: Sample design

### Sampling methods:

*Localities:* Stratified sampling with simple random sampling in each stratum

*Outlets:* Purposive sampling

*Products:* Judgmental sampling

**Criteria used for determining the optimal sample sizes and the coverage of localities, outlets, items and variety samples:** Outlet sample: Purposive sampling

Item selection: Judgemental.

Sample size: 25,000 prices from approximately 2,000 outlets. In addition prices for approximately 4,000 rental units are collected once a year.

**Criteria used for selecting an item variety in the outlet in case of loose specifications provided by the central office:** The item/product specifications used are relatively broad.

## E: Data Collection

**Approximate number of localities, outlets and price observations:** Outlets: 2,000, Price observations: 25,000

**Frequency with which prices are collected:** Prices are collected monthly or with less frequency for particular goods and services whose prices are known to change less frequently.

**Reference period for data collection:** Prices are collected every month in the period 7th-15th. Prices for fresh foods and energy are always collected across more than one working week.

### Methods of Price Collection

- Personal data collection for clothing and fresh food
- Mailed questionnaires
- Internet
- Price lists

### Treatment of:

**Missing or faulty prices:** The majority of missing prices are imputed by the average price change in the corresponding elementary aggregate.

**Disappearance of a given type or quality from the market:** The nearest substitute or the items with largest sales are chosen as replacement, depending on the circumstances.

**Quality differences:** When the quality is assessed not to be significantly changed, the whole of the price difference is taken into the index. Where the whole of the price difference is considered a result of a quality change, no price changes are taken into the index. In many cases imputation is used to correct for quality change. Otherwise overlapping prices or "monthly matched model and chaining" are used if possible and appropriate. Explicit quality adjustments are made for rental

**Appearance of new items:** Newly significant goods and services can be introduced into the sample every month as long as they belong to the existing elementary aggregates.

### **Treatment of seasonal items and seasonality**

**Items that have a seasonal character and their treatment:** Clothing and fresh food. Two sets of clothing, for summer and winter respectively, are used: only the summer clothing enters into the index in the summer period and vice versa in the winter period. For fresh fruits and vegetables only items that can be found the whole year are followed.

### **Treatment of housing**

**Treatment of owner-occupied housing:** Rental equivalent approach is used for owner occupied housing.

## **F: Computation**

**Formula used for calculation of elementary indices:** The ratio of geometric mean prices (Jevons index) (Chained form)

**Formula to aggregate elementary indices to higher level indices:** Elementary aggregate indices are combined into sub-indices and into the total CPI by the use of the Laspeyre's formula.

**Seasonally adjusted indices:** The data are not seasonally adjusted.

## **G: Editing and validation procedures**

**Control procedures used to ensure the quality of data collected:** Verification of prices: Extremes are detected by the Hidioglou-Berthelot (HB) model. The HB extremes are checked and included or excluded accordingly.

## **H: Documentation and dissemination**

**Timeliness of dissemination of the CPI data:** The consumer price index is published on the 10th or the first working day thereafter, following the month in which the data was collected.

### **Level of detailed CPI published**

**Paper publication:** All items CPI, Division-level (12 Divisions), Group-level app. 40 groups

**Online:** All items CPI, Division-level (12 Divisions), Group-level app. 40 groups

### **Documentation**

**Publications and websites where indices can be found:** Monthly: "Monthly Review of Statistics". The Internet website: <http://www.dst.dk/priser> contains time series for consumer prices, the net price index and the Danish harmonized index of consumer prices. Also see [www.statbank.dk](http://www.statbank.dk) .

**Publications and websites where methodological information can be found:** The methodology is described in "Declaration of Content" which can be found at <http://www.dst.dk/en/Statistik/dokumentation/Declarations/consumer-price-index.aspx>

### **I: Other Information**

Completed by ILO in 2013.