Cyprus

A: Identification

Title of the CPI: Consumer Price Index

Organisation responsible: Statistical Service of Cyprus, Ministry of Finance

Periodicity: Monthly

Price reference period: 2005 = 100

Index reference period: 2005 = 100

Weights reference period: 2009

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

B: CPI Coverage

Geographical Coverage

Weights: Nation-wide

Price collection: Urban areas

Population coverage: Resident households of nationals and resident households of foreigners in the country.

Population groups excluded: Institutional households (0.46%).

Consumption expenditure includes:

- Food consumed away from home;
- Housing maintenance, minor repairs;
- Purchase of gifts of goods and services given to others outside the household;
- Second hand goods purchased (imported second hand cars);
- Luxury goods;
- Non-life insurance premiums (e.g. vehicle, housing, other property, medical), gross of claims;
- Licences and fees (e.g. driver's licence, hunting licence, vehicle registration)

Consumption expenditure excludes:

- Foods produced for own final consumption;
- Other goods produced for own final consumption;
• Services produced for own final consumption;
• Income in-kind receipts of goods;
• Income in-kind receipts of services;
• In-kind goods received as gifts;
• In-kind services received as gifts;
• Purchase of owner-occupied housing;
• Mortgage repayments;
• Mortgage interest;
• Major repairs, conversions and extensions to owner occupied housing;
• Financial services (including fees for financial advice, brokerage fees);
• Interest payments (excluding mortgage interest payments);
• Life insurance premiums;
• Gambling expenditure, gross of winnings;
• Investment-related expenditures (e.g. purchase of shares/stocks);
• Occupational expenditures;
• Other business-related expenditures;
• Social transfers in-kind of goods and services from government and No-profit institutions serving households;
• Expenditures abroad

C: Concepts, definitions, classifications and weights

Definition of the CPI and its objectives: The Consumer Price Index (CPI) is an economic indicator constructed to measure the changes of prices over time of consumer goods and services acquired, used or paid by households. CPI is used for the estimation of inflation; it measures the average percentage change of prices of various goods and services (shopping basket) that households consume in Cyprus. CPI is also used for many other different purposes, including cost of living allowance (wage indexation), in the economic and monetary policy (interest-rates, productivity, GDP, etc.), in the collective agreements, adaptation of contracts (projects, rents etc.).

Definition of consumption expenditures: For the derivation of the weights the Household Budget Survey is used, which is conducted by the Statistical Service of Cyprus (every 5 years). This survey records the daily expenses of specific households for two weeks. The households sample is distributed to the whole year. Major purchases are recorded for different period, for example cars purchases are covered for one year back and for clothes and footwear purchases for three months back. At the end, all expenses are converted to annual expenditure.

Classification: COICOP

Weights include value of consumption from own production: No

Sources of weights: Household expenditure surveys.

Frequency of weight updates: Every 3-5 years

Price updating of weight reference period to the index reference period: No
Weights for different population groups or regions: No

**D: Sample design**

Sampling methods:

*Outlets:* Quota sampling (a priori fixing of the number of elements)

*Products:* Judgmental sampling, cut-off sampling (the elements with the highest sales or value of other auxiliary variable are included into the sample)

**Frequency of sample updates:**

*Localities:* The samples of localities and outlets remain the same.

*Outlets:* The samples of localities and outlets remain the same.

*Products:* Continuous (on a rotating basis)

If sample updates are irregular indicate when last updates were introduced: In 2010 products list was updated based on the household budget survey. In 2012, a 4th retailer was introduced for the capital of the island.

Criteria used for determining the optimal sample sizes and the coverage of localities, outlets, items and variety samples: For CPI purposes 3 observations for each product/service are collected from each town. This is considered as a sufficient data for Cyprus, which is a relatively small market. All cities are included in the sample. The selection of outlets is based on their sales.

Criteria used for selecting an item variety in the outlet in case of loose specifications provided by the central office: The cut-off sampling is used (the elements with the highest sales) as reported from the shop owners.

**E: Data Collection**

Approximate number of localities, outlets and price observations: Localities: 4, Outlets: 1,400, Price observations: 10,000

Frequency with which prices are collected: Fruit, vegetables and fuels, meat and potatoes-weekly; Education- annually; all the other products-monthly.

Reference period for data collection: Fruit, vegetables and fuels- specific date, on Thursday. All the other products- a full month, between 1 – 24th of each month. For the same outlet the time lag between two successive visits is one month.

Methods of Price Collection

- Personal data collection for all products except those mentioned below.
- Telephone interviews for rents and hotels.

- Internet for transport by air, telephone and bank charges.

- Official tariffs for water supply, refuse collection and electricity.

**Treatment of:**

**Discounts and sales prices:** They are used in the calculation of the index.

**Second hand purchases:** Included (e.g. imported second-hand cars).

**Missing or faulty prices:** Fruits and vegetables – re-weighting of the non-missing prices; Other products – carrying forward the previous observation for one month.

Period for allowing imputed missing prices: For seasonal products (Clothing and footwear) No replacement is done and the last observation is used. For the rest of the products, a missing price is allowed for 1 month. Then, the product is replaced with a similar one (similar specifications) and the price is collected for both the previous and the current month for bridging.

**Disappearance of a given type or quality from the market:** Replacement of item (similar specification) (Bridging).

**Quality differences:** Trace the change of price due to quality change only.

**Appearance of new items:** Major new items are taken into account and they are given the appropriate weight with the next revision of the index (every 5 years). Significant items are introduced if necessary in December of the previous year and they are given the index of the 4digit COICOP category in which they belong.

**Treatment of seasonal items and seasonality**

**Items that have a seasonal character and their treatment:** Fresh fruits, vegetables, clothing and footwear. For Clothing and Footwear No replacement is done and the last observation is used. Re-weighting of the non-missing prices is done for fruits and vegetables.

**Seasonal food items:** Seasonal food items are included in the CPI using fixed weight but the composition changes according to availability (e.g. fruits and vegetables).

**Seasonal Clothing:** Seasonal clothing items are included in the CPI using fixed weights approach: the weights are kept constant over the year, while prices of out-of-season products are estimated or imputed.

**Method to impute the price of seasonal items:** The method used to impute price development in out-of-season periods is carrying forward the last observed price.

**Treatment of housing**
Treatment of owner-occupied housing: Owner occupied housing is not included in the CPI since 2011.

Types of dwellings covered by the rent data: Detached houses, semi-detached houses, complementary houses, dwelling to mixed use building, flats, apartment building. Rent data is collected monthly.

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: Weighted average

\[ I = \frac{\sum I_i \times W}{\sum W} \]

Where \( I \) is the index, \( W \) is the weight, and \( I_i \) is the individual index (sub-index) of the species \( i \) (or group of similar species).

Formula of aggregating regional/population group indices into national index: Weighted average. The weights for the four districts are: Nicosia 42%, Limassol 30%, Larnaca 18% and Paphos 10% which reflect the consumption of the population.

Monthly and annual average prices: Weighted average is used for calculating monthly average prices. Arithmetic mean is used for calculating annual average prices.

Seasonally adjusted indices: No

Software used for calculating the CPI: Microsoft Excel

G: Editing and validation procedures

Control procedures used to ensure the quality of data collected: The quality of the data is ensured by the fact that all prices are collected by price collectors visiting the outlets. Also, all price collectors attend a joint meeting with the management of the CPI section each month where price issues are discussed in detail, to secure a common treatment to problems.

Control procedures used to ensure the quality of data processed: Data entry and major fluctuations of the prices of about 15% are double checked. Price changes which are plus or minus 15% are checked individually.

H: Documentation and dissemination

Timeliness of dissemination of the CPI data: CPI data is published on the 1st Thursday of each month following the reference month.

Level of detailed CPI published
Paper publication: All items CPI, Division-level (12 Divisions)

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

Separate indices published for specific population groups: No

Type of products for which average prices are calculated and disseminated: None

Documentation

Publications and websites where indices can be found: Publication of the CPI is made with an announcement to the media, in the Official Government Gazette and on the website of the Statistical Service of Cyprus (Latest figures: Consumer Price Index). Website: http://www.cystat.gov.cy


I: Other Information

Reported by the country in 2012.