Malta

A: Identification

Title of the CPI: Retail Price Index

Organisation responsible: National Statistics Office (NSO)

Periodicity: Monthly

Index reference period: 2009 = 100


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.

C: Concepts, definitions, classifications and weights

Definition of the CPI and its objectives: The Retail Price Index is the main measure of inflation in Malta. It measures the average change from month to month in the prices of goods and services purchased by most households in Malta.

Classification: COICOP (Classification of individual consumption by purpose)

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, not needed.

D: Sample design

Criteria used for determining the optimal sample sizes and the coverage of localities, outlets, items and variety samples: Item selection: Price collectors are free to choose a specific product for regular pricing. No further specifications and instructions are given and individual price collectors are free to select any item in the initial stage. The only restriction
imposed on their choice is that the particular item has to be sought after by consumers, suitable for regular pricing and likely to be available in the long run. Once the item has been selected, price collectors are required to stick to those specifications for price readings.

Outlet selection: The outlets for price collection are derived from the Business Register according to the market share of each outlet. This ensures that the outlets covered are representative of the entire population.

### E: Data Collection

**Approximate number of localities, outlets and price observations:** Price observations: 9,000

**Frequency with which prices are collected:** Prices are collected monthly. Seasonal product’s prices are collected twice a month in two alternative weeks. Financial services charges are monitored on a quarterly basis and rent quotes are revised once a year.

**Reference period for data collection:** Prices are collected around the middle of each month. Prices for doctors, dentists, consultants and veterinary services are followed in June every year. Education fees are obtained every March and October of each year and school fees for private schools are obtained at the beginning of the academic year (October).

**Methods of Price Collection**

- Personal data collection
- Telephone interviews for education fees.
- Postal sample survey for house rent and garage rent, surveys for doctors, dentists, consultants and veterinary services.

**Treatment of:**

**Discounts and sales prices:** Sales prices are included provided that the item will continue to be available after the sales period. Discount prices that are not available to all potential consumers are excluded.

**Quality differences:** Quality adjustments are done with three methods: i) Direct price comparison where the price of a new item, which differs slightly from the base item, is accepted. The underlying assumption is that the observed difference in price between the new and old product is entirely due to price change, not quality difference. This method is applied to the clothing items and non-food products; ii) Computers option cost index. This was introduced for the purpose of monitoring computers. It refers to a situation where a feature which was previously optional in a model becomes standard. Where the price of the option is known, it can be used as a measure of the change in quality of the model; iii) New cars hedonic index: The hedonic approach is a basic technique whereby the price (usually the log of the price) of a particular item is regressed on a set of statistically significant variables measuring its quality in every time period.
Treatment of seasonal items and seasonality

Items that have a seasonal character and their treatment: The seasonal items are fresh vegetables, fresh fruits and fresh or chilled fish. Item monitoring of seasonal items varies from month to month according to market and weather conditions. The seasonal food items are included in the CPI using the Rothwell-type method whereby the overall weights of fish, fruits and vegetables are constant throughout the year but the weights of the individual items pertaining to these three groups are variable.

Seasonal food items: Seasonal food items are included in the RPI 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: Impute the price by using price development of in-season products.

Treatment of housing

F: Computation

Formula to aggregate elementary indices to higher level indices: Elementary index aggregation is according to the fixed Laspeyre’s formula. The RPI is a fixed quantity price index. The index \( I_t \) at time \( t \) is a Laspeyres-type or fixed base weight index, being the price of the basket at a given time expressed as a percentage of its price on the base date:

\[
I_t = \frac{\sum P_{it}Q_{ib}}{\sum P_{ib}Q_{ib}} \times 100
\]

Where:

\( P_{it} \) = price for the \( i^{th} \) item at time \( t \);

\( P_{ib} \) = price for the \( i^{th} \) item in the base year;

\( Q_{ib} \) = quantity of \( i^{th} \) item purchased in the base year.

Alternatively the above equation can be written as follows:

\[
I_t = \frac{\sum (P_{it}Q_{ib})w_i}{\sum w_i} \times 100
\]

where \( w_i = P_{ib}Q_{ib} \).

This is a weighted average of price relative, the weight being the expenditure on item \( i \) in the base period.

G: Editing and validation procedures

Control procedures used to ensure the quality of data collected: It is the responsibility of the consumer prices unit staff members to validate manually all price quotations and query any significant discrepancies. Price collectors indicate any changes for the benefit of the consumer prices officials.
H: Documentation and dissemination

Level of detailed CPI published

Paper publication: All items CPI, Division-level (12 Divisions)

Online: All items CPI, Division-level (12 Divisions)

Documentation


Publications and websites where methodological information can be found: A methodological document explaining the compilation and computation RPI is available at http://www.nso.gov.mt/site/page.aspx?pageid=402

I: Other Information

Completed by ILO in 2013.