

Jamaica

A: Identification

Title of the CPI: Consumer Price Index

Organisation responsible: Statistical Institute of Jamaica (STATIN)

Periodicity: Monthly

Price reference period: December 2006 = 100

Index reference period: December 2006 = 100

Weights reference period: 01/12/2006

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, deflate household expenditures in national accounts, computation of purchasing power of households, macroeconomic modelling and other analytic uses.

B: CPI Coverage

Geographical Coverage

Weights: Nation-wide

Price collection: Nation-wide

Population coverage: Resident households of nationals.

Population groups excluded: High income households (15%).

Consumption expenditure includes:

- Foods produced for own final consumption;
- Other goods produced for own final consumption;
- Services produced for own final consumption;
- Food consumed away from home;
- Income in-kind receipts of goods;
- Income in-kind receipts of services;
- In-kind goods received as gifts;
- In-kind services received as gifts;
- Mortgage repayments;
- Housing maintenance, minor repairs;
- Purchase of gifts of goods and services given to others outside the household;
- Luxury goods;

- Non-life insurance premiums (e.g. vehicle, housing, other property, medical), gross of claims;
- Life insurance premiums;
- Licences and fees (e.g. driver's licence, hunting licence, vehicle registration);
- Expenditures abroad

Consumption expenditure excludes:

- Purchase of owner-occupied housing;
- 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);
- Gambling expenditure, gross of winnings;
- Investment-related expenditures (e.g. purchase of shares/stocks);
- Occupational expenditures;
- Other business-related expenditures;
- Second hand goods purchased;
- Social transfers in-kind of goods and services from government and No-profit institutions serving households

C: Concepts, definitions, classifications and weights

Definition of the CPI and its objectives: The Consumer Price Index measures changes in the general level of prices of consumer goods and services purchased by private households.

Definition of consumption expenditures: Payment

Classification: Each item is given a 12 digit code. The first four digits are COICOP – to the four digit level and the last eight digits are an extended CPC code.

Weights include value of consumption from own production: Yes

Sources of weights: Household expenditure surveys.

Frequency of weight updates: Above 5 years

Price updating of weight reference period to the index reference period: Weights are based on an expenditure survey carried out in 2004-2005 and the reference period used for the index is 2006. The weights are adjusted to take account of the time lag between two periods.

Weights for different population groups or regions: Weights are computed for the Greater Kingston Metropolitan Area (GKMA), Other Urban Centres (OUC) and Rural Areas (RA) and from this all Jamaica weights are derived. The Statistical Institute of Jamaica (STATIN) publishes the CPI for the low to middle income groups of the population. Weights are computed for the upper income group of the population however, computation of the index number series for this income group is not completed.

D: Sample design

Sampling methods:

Localities: Judgmental sampling

Outlets: Judgmental sampling

Products: 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: Continuous (on a rotating basis)

Outlets: Continuous (on a rotating basis)

Products: At the time of conducting HES.

If sample updates are irregular indicate when last updates were introduced: Samples are updated as soon as an outlet is reported as closed or out of business. STATIN tries to maintain the localities from which prices are collected for the CPI. However, products are selected only following the conduct of a household expenditure survey.

Criteria used for determining the optimal sample sizes and the coverage of localities, outlets, items and variety samples: The basket includes only items contributing 0.5 percent or more to the total value of expenditure. Groups and sub-groups with a percentage of less than 0.5% are eliminated and the weight redistributed to the remaining groups; and secondly, items with a percentage of less than 0.5% of a sub-group or group are also eliminated and the weight redistributed to the remaining items. The method of redistribution employs the following procedure: $\frac{\text{Sum of the weight of the item} \times \text{new sum}}{\text{old sum}}$

Criteria used for selecting an item variety in the outlet in case of loose specifications provided by the central office: The specifications are tight.

E: Data Collection

Approximate number of localities, outlets and price observations: Localities: 68, Outlets: 830, Price observations: 49,700

Frequency with which prices are collected: All prices are collected monthly.

Reference period for data collection: The first full week of each month

Methods of Price Collection

- Personal data collection for majority of the items.

- Telephone interviews for motor vehicles and air fares.
- Internet for utilities, telephone rates, and air fares.
- Official tariffs for utilities, fees related to motor vehicles and services related to dwellings.

Treatment of:

Discounts and sales prices: They are not taken.

Black market prices: Not collected.

Second hand purchases: Not included.

Missing or faulty prices: Missing prices are treated by carrying forward the previous month's price observations or extrapolation by using the change of the other prices for the same item.

Period for allowing imputed missing prices: Imputation for a missing price is allowed for a period not exceeding three months.

Disappearance of a given type or quality from the market: In the event of the disappearance of a given type or quality from the market there is a replacement of the item or variety. The price of the new item or variety is worked into the index using the overlapping price technique or matched modelling.

Quality differences: The price of the new item or variety is worked into the index using the overlapping price technique or matched modelling.

Appearance of new items: New items are included at the time of updating the basket of goods and services, when new HBS is conducted.

Treatment of seasonal items and seasonality

Items that have a seasonal character and their treatment: The price data are not seasonally adjusted despite the fact that fresh fruits and vegetables have a seasonal characteristic. Jamaica is a tropical island and as such there are no marked distinctions in the seasons

Seasonal food items: Seasonal food 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.

Seasonal Clothing: There are no extreme weather conditions and as such there are no marked distinctions in the seasons. Weights are fixed.

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: The geometric mean of the average price for the Studio, 1, 2, 3 and 4 bedroom units is used as a proxy for owner-occupied housing.

Types of dwellings covered by the rent data: For the rent data, the Statistical Institute of Jamaica uses a household survey and covers the rental of Studio, 1, 2, 3 and 4 bedroom units. The cost of rental for these units is collected on a monthly basis island wide. The geometric mean is used to compute the average price for each of these units.

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: Price indices for higher level indices such as groups, divisions, and all items are computed by aggregating the elementary item indices and weighting them by their relative importance in the CPI basket. The mathematical formula for calculating an aggregate index is:

$$I_A^t = \frac{\sum_{i=1}^n I_i^t \times W_i}{\sum_{i=1}^n W_i}, \text{ where}$$

I_A^t is the aggregate price index for the n elementary item indices included in the aggregate,
 I_i^t is the price index for elementary item i in period t and
 W_i is the relative importance (expenditure share) of the elementary item index i in the CPI basket.

Formula of aggregating regional/population group indices into national index:
Laspeyre's index formula.

Seasonally adjusted indices: No seasonal adjustment.

Software used for calculating the CPI: Microsoft Excel, RPG, Command Language and Microsoft Access

G: Editing and validation procedures

Control procedures used to ensure the quality of data collected: A detailed specification manual has been developed so as to ensure that the same item is priced every month in order to establish a true picture of price changes.

Control procedures used to ensure the quality of data processed: The price entered is compared with the price for the same product in the same shop in the previous month, and triggers a query where the price difference is outside pre-set percentage limits. A query is raised if the price entered exceeds a maximum or is below a minimum price for the item of which the particular product is representative. Price statisticians keep abreast of what is happening in the country so that announced price movements are adequately captured.

H: Documentation and dissemination

Timeliness of dissemination of the CPI data: The CPI is published on the 15th day after the end of the reference month. In instances where the 15th falls on a weekend the CPI is published on the following Monday.

Level of detailed CPI published

Paper publication: All items CPI, Division-level (12 Divisions), Group-level app. 40 groups, Class-level (100 classes)

Online: All items CPI, Division-level (12 Divisions), Group-level app. 40 groups, Class-level (100 classes)

Separate indices published for specific population groups: The low-middle income group.

Type of products for which average prices are calculated and disseminated: Average prices are not disseminated since December 2006.

Documentation

Publications and websites where indices can be found: CPI Monthly Bulletin, CPI Annual Review, Pocketbook of Statistics, Statistical Yearbook, Statistical Digest – This is published by the Bank of Jamaica (the Central Bank)

Publications and websites where methodological information can be found: Consumer Price Index Monthly Bulletin for May 2012, Consumer Price Index Annual Review 2011, Internet website: www.statinja.gov.jm

I: Other Information

Reported by the country in 2012.