Egypt

A: Identification

Title of the CPI: Consumer Price Index

Organisation responsible: Central Agency for Public Mobilization and Statistics (CAPMAS)

Periodicity: Monthly

Price reference period: January 2010 = 100

Index reference period: January 2010 = 100


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 and temporary visitors.

Population groups excluded: Institutional households.

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;
- Housing maintenance, minor repairs;
- Second hand goods purchased (second hand cars only);
- 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);
- Occupational expenditures
Consumption expenditure excludes:

- 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;
- Purchase of gifts of goods and services given to others outside the household;
- 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);
- 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: CPI is the measure of the average change over time in the prices of consumption items - goods and services - that people buy for every day life. The Goals are: i) CPI reflects the change in the level of prices of commodities and services and wages; ii) One of the important indicators of inflation; iii) Important tool used for GDP calculation with fixed prices.

Definition of consumption expenditures: Consumption Expenditure may be measured in term of: a) Use approach - Implies the total value of all goods and services actually consumed during the reference period irrespective of whether they were acquired during that period or not, and whether the full payment was made during that period or not. This approach is used for food, non alcoholic beverages and alcoholic beverages, tobacco and narcotics; b) Acquisition approach - Implies the total value of goods and services delivered during the reference period, whether the full payment for the goods and services was made during that period or not, and whether they were used during that period or not. This approach is used in clothing and footwear; c) Payment approach - Implies the total payment made for goods and services during the reference period irrespective of whether the goods and services paid for were fully delivered during that period or not, and whether they were used during that period or not. This approach is used in housing and its accessories, health, operation of personal transport equipments, transport services, communications, other recreational items and equipments, gardens and pets, recreational and cultural services, newspapers, books and stationery, package holidays, education, restaurants and hotels and personal care. Both Acquisition and payment approaches are used in furnishings, household equipments and routine maintenance of the house, purchase of vehicles and some items of recreation and culture such as audio-visual, photographic and information processing equipments and other major durables recreation and culture. The purpose of applying acquisition and payment
approaches to durable and semi-durable items is to serve for both the compilation of consumer price index (acquisition) and welfare analysis (payment).

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

**Weights include value of consumption from own production:** Yes

**Sources of weights:** Household expenditure surveys.

**Frequency of weight updates:** Every two years

**Price updating of weight reference period to the index reference period:** Given the short time period between the 2008/2009 HIEC survey and the base index period in (January 2010), the survey weights are not updated.

**Weights for different population groups or regions:** Weights for all Egypt (Urban - Rural) i.e Cairo, Alexandria, Canal Cities, Frontier Governorates, Lower Egypt, Upper Egypt, Rural Upper Egypt and Rural Lower Egypt.

**D: Sample design**

**Sampling methods:**

- **Localities:** Sampling with probability proportional to size (PPS)
- **Outlets:** Stratified sampling with PPS sampling in each stratum
- **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:**

- **Outlets:** Annual
- **Products:** Annual

**Criteria used for determining the optimal sample sizes and the coverage of localities, outlets, items and variety samples:** Localities: Selection is done by using sampling with probability proportional to size (PPS).

Outlets selection is by using stratified sampling with PPS sampling in each stratum.

Products are selected using cut-off sampling (the elements with the highest sales or value of other auxiliary variable are included into the sample).

**Criteria used for selecting an item variety in the outlet in case of loose specifications provided by the central office:** The best selling

**E: Data Collection**
**Approximate number of localities, outlets and price observations:** Outlets: 14,422, Price observations: 159,373

**Frequency with which prices are collected:** i) Food application: (cereals and pulses, flour and milk products, perfumery) – monthly; (meat and poultry) – weekly; (vegetables and fruit) – weekly; (groceries, canned vegetables and fruit) – monthly; (milk, cigarettes and tobacco, soft drinks etc) – monthly; ii) Industrial application: (fabrics, textiles and shoes) – monthly; (furniture, tools and household items, a variety of items) – monthly; (electrical Appliance, Automotive) – Monthly; iii) Services application: personal services – monthly; education services – yearly; government services and supply commodities – quarterly.

**Reference period for data collection:** i) Food application: (cereals and pulses, flour and milk products, perfumery) – monthly (from 15th to 21st); (meat and poultry) – weekly; (vegetables and fruit) – weekly; (groceries, canned vegetables and fruit) – monthly (from 15th to 21st); (milk, cigarettes and tobacco, soft drinks etc) – monthly (from 15th to 21st); ii) Industrial application: (fabrics, textiles and shoes) – monthly (from 1st to 7th); (furniture, tools and household items, a variety of items) – monthly (from 1st to 7th); (electrical appliance, automotive) – monthly (from 1st to 7th), iii) Services application: personal services – monthly (from 8th to 14th); education services – yearly (October); government services and supply commodities – quarterly.

**Methods of Price Collection**

- Personal data collection for all items.
- Internet for gold.

**Treatment of:**

**Discounts and sales prices:** Dealing directly with the advertised price

**Second hand purchases:** Included for second-hand motor cars only.

**Missing or faulty prices:** Missing prices are imputed by using a geometric mean and not by re-weighing the non-missing prices.

Period for allowing imputed missing prices: Until the missing price appears again.

**Disappearance of a given type or quality from the market:** Replacement product should be similar in terms of specifications and be top selling.

**Quality differences:** Overlap prices.

**Appearance of new items:** The new items should be the best selling and their prices should be available for two consecutive periods.

**Treatment of seasonal items and seasonality**
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: 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: Prices are imputed using price development of in-season products.

Treatment of housing

Treatment of owner-occupied housing: By the same description (area – place...).

Types of dwellings covered by the rent data: Old and new rent is collected twice a year by visiting the household.

F: Computation

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

Formula to aggregate elementary indices to higher level indices: Modified Laspeyre’s formula expressed as

\[ I_{Egypt}^l = \sum_{a=1}^{8} \sum_{i=1}^{479} S_{a,i}^{l-1} \left( \frac{P_{a,i}^l}{P_{a,i}^{l-1}} \right) \], where

\[ S_{a,i}^{l-1} = \frac{s_{a,i}^0}{\hat{P}_{a,i}^0} \times \frac{\hat{P}_{a,i}^1}{\hat{P}_{a,i}^0} \times \frac{\hat{P}_{a,i}^2}{\hat{P}_{a,i}^1} \times \ldots \times \frac{\hat{P}_{a,i}^{l-1}}{\hat{P}_{a,i}^{l-2}} = S_{a,i}^0 \left( \frac{P_{a,i}^{l-1}}{P_{a,i}^0} \right) \], and

\[ s_{a,i}^0 \]: the relative weights for category items \( i \) in area \( a \) for the weight reference period.

\[ s_{a,i}^0 = \frac{e_{a,i}^0}{\sum_{a=1}^{8} \sum_{i=1}^{479} (e_{a,i}^0)} \], with

\[ e_{a,i}^0 \]: the weight as generated from the (2008/2009) HIEC survey and

\[ \hat{P}_{a,i}^0 = 100 \]

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

Monthly and annual average prices: Geometric means are used for average regional prices.

Seasonally adjusted indices: No
Software used for calculating the CPI: Oracle

G: Editing and validation procedures

Control procedures used to ensure the quality of data collected: By Using \( \mu \pm 1.5s \)

Control procedures used to ensure the quality of data processed: By Using \( \mu \pm 1.5s \)

H: Documentation and dissemination

Timeliness of dissemination of the CPI data: 10 days after the end of the reference month.

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

Separate indices published for specific population groups: No

Type of products for which average prices are calculated and disseminated: Annual bulletin prices for food-stuffs and services (producer / wholesale / consumer)

Documentation

Publications and websites where indices can be found: CAPMAS internet website: http://www.capmas.gov.eg


I: Other Information

Reported by the country in 2012.