

Consumer Price Index (CPI) - Metadata

Contact Person

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| 0. Prerequisites | |
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| 0.1 Legal environment | <p>0.1.1 Responsibility for collecting, processing, and disseminating statistics</p> <p><u>Central Administration of Statistics</u></p> <p>In Lebanon, Central Administration of Statistics is responsible for delivering official statistical data to national users (ministries, researchers, etc.) and international users (UNSD, IMF, etc.).</p> <p>The law of 1979 established the Central Administration of Statistics (CAS). The Central Administration of Statistics assumes the following functions:</p> <ul style="list-style-type: none"> 1 - To assume itself or in cooperation with the involved administrations to set forth all statistics related to the economical and social life of the country. 2 - To unify the data bases related to institutions or individuals used in the administrations to extract the statistical data from it, and to supervise technically the statistics that the administrations lay down and to centralize and coordinate it. 3 - To set up the internal economical accountings (the national accounts), the Balance of Payments, and the other annual statement regarding the economical and social activities of the country. 4 - To carry out the statistics, investigations, and studies requested by the Council of Development and Reconstruction, and the other economical studies requested by the other administrations. 5 - To carry out mandatory statistical surveying, should be considered as mandatory any statistical survey carried out by the central administrations of statistics directly, or through another institution, and published in the official journal. 6 - Analysis and publication of the statistics that are laid down. 7 - To contribute, with the Civil Service Council, to the preparation and training of the employees working with statistical units related to the administrations. <p>0.1.2 Data sharing and coordination among data producing agencies</p> <p><u>Central Administration of Statistics</u></p> <p>Lebanon has one and only one organization for official statistics. Central Administration of Statistics is located in the capital and has the authorization to open regional statistical offices affiliated to the central office.</p> <p>CAS cooperates with other ministries and institutions to compile Lebanon's statistics. CAS</p> |

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| | <p>receives from its partners like the Central Bank, Customs, and different ministries all data needed to produce Lebanon's annual Statistical Year Book</p> <p>0.1.3 Confidentiality of individual reporters' data</p> <p><u>Central Administration of Statistics</u></p> <p>The law on Central Administration of Statistics of February 22, 1979 insists on insuring data confidentiality</p> <p>"Article 5: All the administrations shall put at the disposal of the Central Administration of Statistics the documents, instruments and information it needs so as to set out the statistics. The physical and moral entities of the private sector shall respond to the statements and application forms related to mandatory investigations carried out by the central administration central of statistics provided that this matter would not prejudice the secret of the profession, nor any other secrecy provided for in the law."</p> <p>Moreover, the employees of the Central Administration of Statistics, even if they hired on temporary basis, are prohibited from disclosing to other people, included administrations, the information related to private and familial life of individuals, and to the financial and professional situations of the physical and moral entities.</p> <p>"Article 8: The employees of the central administration of statistics, and the other workers it, must administer, before taking office, the following oath before the civil court of first instance: " I swear to God the greatest to keep the secret of the job and to carry out its tasks with fidelity and sincerity"."</p> |
| 1. Integrity | |
| 1.2 Transparency | <p>1.2.2 Internal governmental access to statistics prior to release</p> <p><u>Central Administration of Statistics</u></p> <p>The general policy of Central Administration of Statistics is to publish Consumer Price Index (CPI) and related tables on the website on the first working day after the 20th of each month for all interested parties at the same time.</p> |
| 2. Methodology | |
| 2.1 Concepts and definitions | <p>2.1.1 Concepts and definitions</p> <p>The CPI generally follows internationally accepted concepts and definitions as specified in the international <i>CPI Manual</i> and for the <i>1993 SNA</i>. Among the minor and/or internationally common exceptions to the <i>1993 SNA</i> are the exclusion of illegal goods and services, and the exclusion of expenditure weights for gambling and prostitution.</p> <p>CAS publishes the national CPI as the key measure of inflation in Lebanon. No regional CPI indices are published. In all the discussion that follows the CPI described is the national CPI.</p> <p>Expenditure weights are broken down at the Division (12), Group (44), Class (102), and Subclass (486) of the COICOP classification, using household budget survey data for disaggregation within higher-level national accounts values.</p> |
| 2.2 Scope | 2.2.1 Scope |

| | <p>Scope of the data</p> <p>The index covers the consumption of all goods and services bought by resident households in Lebanon. The only exclusions are people in institutions (prisons, hospitals, army, etc.) and consumption of illegal goods and services.</p> <p>Exceptions to coverage</p> <p>Among the items within the scope of national accounts household consumption, the CPI does not cover games of chance, costs for life insurance, costs for pension premiums, and Financial Intermediation Services Indirectly Measured.</p> | | | | | | | | | | | | | | | | | | |
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| 2.3 Classification | <p>2.3.1 Classification</p> <p>COCIOF is used to classify all products and services included in the basket. To ensure a better description and price collection of products in the Lebanese market CAS added one digit level on the international COICOP.</p> | | | | | | | | | | | | | | | | | | |
| 2.4 Basis for recording | <p>2.4.1 Valuation</p> <p>Two main price collection methods are employed. The main one used for with most items is the price survey on the field carried out by price collectors. The other collection is central collection by telephone, fax, email, Internet or mail. Number of products collected centrally is only around 25, but they include some higher expenditure share products as imputed rents and electricity charges.</p> <p>2.4.2 Recording basis</p> <p>Prices are collected on monthly basis in the large part of the basket and correspond to the time of purchase. Rental data are collected twice a year based on a sample of 1200 dwellings covering the totality of the Lebanon.</p> | | | | | | | | | | | | | | | | | | |
| 3. Accuracy and reliability | | | | | | | | | | | | | | | | | | | |
| 3.1 Source data | <p>3.1.1 Source data collection programs</p> <p>Expenditure weights</p> <p>The main source for the CPI expenditure weights to the six-digit COICOP level is the National Household budget survey for 2004-2005 covering the totality of the Lebanese territory. Prior to the CPI December 2007 base month, the CPI weights source was the Household Budget survey conducted in the Capital and its near suburbs and the Household living conditions for the totality of the Lebanese territory in 1997.</p> <p>Table 1. Weight structure of the main groups</p> <table> <tr> <th>Main Group</th><th>Weight</th></tr> <tr> <td>Food and non-alcoholic beverages</td><td>20.6%</td></tr> <tr> <td>Alcoholic beverages, tobacco</td><td>1.6%</td></tr> <tr> <td>Clothing and footwear</td><td>5.4%</td></tr> <tr> <td>Housing, water, electricity, and gas</td><td>28.5%</td></tr> <tr> <td>Furnishings, household equipment and maintenance</td><td>3.7%</td></tr> <tr> <td>Health</td><td>7.8%</td></tr> <tr> <td>Transportation</td><td>13.1%</td></tr> <tr> <td>Communication</td><td>4.6%</td></tr> </table> | Main Group | Weight | Food and non-alcoholic beverages | 20.6% | Alcoholic beverages, tobacco | 1.6% | Clothing and footwear | 5.4% | Housing, water, electricity, and gas | 28.5% | Furnishings, household equipment and maintenance | 3.7% | Health | 7.8% | Transportation | 13.1% | Communication | 4.6% |
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| | <p>Recreation, amusement, and culture 2.3%</p> <p>Education 5.9%</p> <p>Restaurant & hotels 2.6%</p> <p>Miscellaneous goods & services 4.0%</p> <p>CAS will update the CPI weights with every household budget survey conducted.</p> <p>Sampling and price collection</p> <p>The price collection for the CPI is national. The prices are collected locally by price collectors visiting retail outlets throughout Lebanon.</p> <p>The sample of products and outlets is specified centrally based on a special survey conducted in 2007 to determine for each type of products in every governorate the list of outlets and products that represent the major part of consumption. Among this list CAS selected a number of outlets to be included in the price collection for CPI. The total number of outlets participating in the CPI is around 2000.</p> <p>The updating of the list of outlets is done periodically to ensure the representativity of the outlets and hence the prices collected from.</p> <p>The product specifications in the CPI are very tight. Every product included in the basket has an identification number that specifies its characteristics. The price imputation and product substitution are validated for the products having the same identification number.</p> <p>No price collected for second-hand goods.</p> <p>On average about 50,000 prices are collected monthly in the process described above.</p> <p>3.1.2 Source data definitions, scope, classifications, valuation, and time of recording</p> <p>Most of the products are collected monthly. All price collection takes place within the publication month. A small number of the prices are collected quarterly like tissues and furniture, biannually rents and medical fees and annually the school fees and new cars.</p> <p>3.1.3 Source data timeliness</p> <p>Prices are collected during the all-reference month. Price collectors and central CAS staff have follow-up procedures to ensure timely receipt of source data. Timeliness of the price collection survey is adequate for disseminating the CPI according to schedule.</p> |
| 3.2 Assessment of source data | <p>3.2.1 Source data assessment</p> <p>The questionnaires are formed in such a way that only item specifications of each variety are shown to the price collector. This method is used to ensure that the prices of the same goods are given and to prevent simply copying of the previous price.</p> <p>Certain prices may be incorrectly excluded from the index compilation if the validation procedures fail to find a satisfactory reason for a large change. Similarly, small price changes that are not real may go into the index compilation. Field procedures and random checks to audit the surveyors work tries to minimize these errors.</p> <p>Outlets that refuse to collaborate with CAS surveyors may contribute to non-response error. New outlets are chosen to replace ones that completely refuse to participate.</p> <p>The sample of goods and services are updated once a year, where new products are introduced and replace old products.</p> |

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| 3.3 Statistical techniques | <p>3.3.1 Source data statistical techniques</p> <p>The price collection is made manually by the price collectors in the regions. A first revision to report the unusual changes and extreme values are made by the controller on charge of every group of price collectors.</p> <p>Data entry is made centrally three times the month. Automated price checking for extreme values, inconsistent prices, and missing values is generated and delivered to price collectors for verification and rectification.</p> <p>At the end of the data entry process for each month; a last data validation is made and imputed prices are generated for each missing price using the average monthly change of prices for the same product in the same data collection region.</p> <p>Sampled items are replaced if prices are missing for three consecutive month. The price collectors with the coordination of the controllers in each region report to the administration the list of item-candidates for replacement. The later choose the item with the nearest specifications the missing product.</p> <p>Missing prices for seasonal product are imputed until the arrival of the concerned season. No special weight for the seasonal products is made.</p> <p>Quality differences between new and replaced product are handled by the CAS central office, proportional quantity adjustment for small changes in package size.</p> <p>No hedonic methods are used in the CPI.</p> <p>3.3.2 Other statistical procedures</p> <p>3.3.2.1 Calculating the elementary aggregate</p> <p>For most goods and services, the elementary aggregate used is defined as a product within a 6-digit COICOP subclass in a certain region. However, for many goods and services that are collected centrally the elementary aggregate may consist of only few prices, or in some complex goods and services such as holiday travel, the elementary aggregate index is calculated outside the system and integrated into the system as a direct subclass index. For most products the elementary aggregates are calculated as equally weighted geometric average of individual observed price changes from base period to current period. Since the content of individual elementary aggregate can slightly change from time to time, the calculation is made linking the EA of previous period to the monthly change from previous period to current period.</p> $EA_{lm}^t = \prod_{i=1}^{N_{lm}} \left(\frac{p_{lmi}^t}{p_{lmi}^0} \right)^{1/N_{lm}} = EA_{lm}^{t-1} \times \prod_{i=1}^{N_{lm}} \left(\frac{p_{lmi}^t}{p_{lmi}^{t-1}} \right)^{1/N_{lm}},$ <p>Where the indexation refers to price relatives i of elementary aggregate m of product l</p> <p>3.3.2.2 Calculating higher level indices</p> <p>Once the elementary aggregate indices or micro indices are calculated, the all-Lebanon CPI and all its sub-indices at class, group and division can be calculated as weighted averages of the micro indices.</p> <p>The two-stage modified geometric Lasperyes (strictly speaking a young index because the weight period precedes the price base period) index was chosen as the formula to aggregate</p> |

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| | <p>the micro indices to higher-level indices</p> $I_p^t = \prod_{k \in P} EA_k^t w_k^0.$ <p>The weights of individual elementary aggregates w_k^0 are derived from the regional (for each Muhafaza) average consumption of each COICOP sub-class and the relative importance of products (at the beginning set to be equal, but later possibly adjusted) within each subclass.</p> |
| 3.4 Data validation | <p>3.4.1 Validation of results</p> <p>Data validation is made only to the prices collected within the publication month.</p> |
| 3.5 Revision studies | <p>3.5.1 Revision studies and analyses</p> <p>No revisions are made or published after the release of the CPI.</p> |
| 4. Serviceability | |
| 4.1 Periodicity and timeliness | <p>4.1.1 Periodicity</p> <p>The CPI is produced on a monthly basis, in accord with SDDS standards.</p> <p>4.1.2 Timeliness</p> <p>The CPI is released in a timely manner, the second day after the 20th following the end of the reference month.</p> |
| 4.2 Consistency | <p>4.2.1 Internal consistency</p> <p>No annual weight updating is made to the actual CPI. The two-stage modified geometric Lasperyes is used for the compilation of the CPI.</p> <p>4.2.2 Temporal consistency</p> <p>CAS compiles a new CPI with December 2007 as reference month and 2004 as reference period for the weights. Previously, CAS compiled the CPI from 2000 to 2007 with December 1999 as a reference month and year 1997 as a reference period for the weights. No link was made for these two series because of the difference in the geographical coverage and the number of posts and items included in both CPIs.</p> |
| 5. Accessibility | |
| 5.1 Data | <p>5.1.1 Statistical presentation</p> <p>The CAS website makes detailed data available with the CPI release. Data series can be downloaded from the website in a variety of formats. CPI figures are only presented in a</p> |

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| | <p>non seasonally adjusted form.</p> <p>5.1.2 Dissemination media and format</p> <p>CAS releases the CPI on the website and disseminate by e-mail to the media and other subscribed parties without charge. In the same time a hard cover press release is sent to the High Officials in the Lebanese government. The press release contains the month to month and year to year inflation and CPI. A list of graphs is provided to each consumption post describing the movement of the post from the beginning of the publication of the CPI. A brief explanation of the sources of variations of the CPI is provided with an explanation on the concepts and definition adopted.</p> <p>Electronic - On-line bulletin or data</p> <p>(http://www.cas.gov.lb) for the CPI data published in the press release.</p> <p>5.1.3 Advance release calendar</p> <p>The CAS releases the CPI on the first working day after the 20th of each month.</p> <p>5.1.4 Simultaneous release</p> <p>CAS doesn't share any information regarding the content of CPI with any political institution before publication date. The figures are made available to all public at the same preannounced time, 10:30 a.m. of the releasing date, by press release and publication database. The press, ministries and central bank are not briefed in advance. Questions by public are answered centrally by CAS.</p> <p>5.1.5 Dissemination on request</p> <p>Unpublished CPI data are not made available to the public</p> |
| 5.2 Metadata | <p>5.2.1 Dissemination of documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques</p> <p>With every press release CAS annexes information about the definition and the method used to compile CPI. The main language for dissemination is Arabic. Tables and graphs are bilingual Arabic and English.</p> <p>5.2.2 Disseminated level of detail</p> <p>CAS disseminates the CPI on two digits level. A brief note explains the most post that affected the growth of CPI without mentioning the detailed indexes.</p> |
| 5.3 Assistance to users | <p>5.3.1 Dissemination of information on contact points</p> <p>CAS team is always present to respond on the phone or by mail to any technical question raised. Answers are provided within two working days if possible.</p> <p>5.3.2 Availability of documents and services catalogs</p> <p>All publications and press releases are catalogued on the website. These are available without charge.</p> |