Economic Commission for Europe
Group of Experts on Consumer Price Indices
Twelfth session
Geneva, 26–28 May 2014
Item 3 of the provisional agenda
Methodological issues

Practice of calculating consumer price indices in Azerbaijan

Paper prepared by the State Statistical Committee of the Republic of Azerbaijan

Summary

This document sets out the methodology for calculating consumer price indices (CPIs) in Azerbaijan. The paper describes national and regional consumer price indices and methods of collecting the prices of goods and paid services. The weighting system and CPI calculations are also covered.
I. Introduction

1. The consumer price index in Azerbaijan has been developed following the methodology and with the support of the International Monetary Fund and was introduced as an official tool for the measurement of inflation in January 1995.

2. The methodology for compiling the CPI is constantly being improved, which can be explained largely by the substantial changes in the rate of inflation and consequently the greater need for precise calculations. In mid-2005, Azerbaijan began work on the calculation of a new consumer price index and regional CPIs.

3. In Azerbaijan attempts to examine regional price movements have been made on several occasions, but the first surveys were essentially pilots, with the objective of evaluating differences in consumer prices between certain major regions in the country.

4. The new administrative division of the country into 11 economic regions and the growing demand for information on consumer price movements in particular regions made it possible to draw representative samples at the regional level.

II. National and regional CPIs

5. The Classification of Individual Consumption According to Purpose (COICOP) is applied for the calculation of regional and national CPIs and expanded depending on local conditions.

6. The CPI is calculated using information derived from two sources:
   (a) Data on price changes gathered through the monthly collection of prices and tariffs on the consumer market;
   (b) Data on the pattern of actual consumer spending by the public over the preceding year, estimated on the basis of figures from a sample household survey.

III. Price collection

7. The observation of prices of goods and paid services on the consumer market and calculation of consumer price indices involve the following steps:
   (a) Sampling of core enterprises in the distributive trade and service sectors;
   (b) Sampling of representative goods and services;
   (c) Collection of prices and tariffs;
   (d) Establishment of a structure of weights for calculating the CPI;
   (e) Calculation of the CPI;
   (f) Calculation of average prices or tariffs for goods and services.

8. The frequency and timing of price collection is the same for all regions. Data are collected between the 1st and 30th of each month. Information on food prices is obtained three times a month every 10 days, while prices for all other goods and services included in the list are collected once a month. The price information gathered covers every possible large, regular sales outlet for each good, including major supermarkets, department stores,
convenience stores, specialist retailers, kiosks, and farmers’ and other consumer goods markets.

9. Points of sale are located in various districts of a city and vary in size. Two to three prices are recorded for each item in various shops in the city centre and three to four prices are recorded in those on the outskirts. Prices are observed at approximately 9,500 points of sale in the country — 3,500 in the capital and about 6,000 in the regions — covering all kinds of sales outlets. The “food” group accounted for the largest number of prices collected (8 to 10); the “rent, water, heating, electricity” group, where prices and tariffs are established centrally, for the lowest number. Six to seven price quotations are obtained on average for each of the other groups. The sampling of basic service providers has focused on businesses offering people the greatest range of services.

10. The fact that the consumer market is saturated with all kinds of goods adds to the complexity of the exercise and calls for accurate recording of the items in greatest demand, since the varying quality of the same type of good (different producer countries, all sorts of imitations, goods with expired shelf lives, etc.) makes for a wide price range in the capital and, especially, in the provinces. This applies to both food and non-food products.

11. Another factor — the steady growth in prosperity — is facilitating price collection, since there has been a gradual increase in the number of price collection visits to specialist retail outlets offering a wide range of high-quality goods throughout the year and with the price shown on the packaging of any good on offer.

12. In sampling a particular kind of good, preference is given to an item likely to be on sale in subsequent months. The samples comprised goods that are representative of the typical consumer and are not based on the price collector’s personal tastes. The item selected is described in detail in the price collector’s forms. If there is a change in quality or a new product appears, the range of goods observed or the point of sale is immediately changed. If a particular type or kind of good disappears from sale, two principal methods are used to ensure continuity in the calculation of the price indices:

   (a) Substitution of the representative good or service;

   (b) Use of an estimated price (the average price for the period preceding the disappearance of the good is adjusted with reference to the overall index of prices for a group of similar goods).

13. Records are kept of the actual prices of off-the-shelf goods (excluding goods sold at preferential rates) and paid for in cash. The recorded price includes VAT, excise duties and other indirect taxes. Standard national, centrally regulated prices are collected every quarter from the relevant organizations. This group includes prices for:

   (a) Electricity, natural gas and water;

   (b) Rail and air transport, postal services and communications.

14. Goods with price floors and ceilings are sampled in proportion to their respective share in total sales. For each good, enough prices are collected to make a representative calculation of its average price. The average price of a good is calculated as the geometric mean. Since 2005, observation of price levels and price movements has included paid education services.

IV. Weighting system and CPI calculation

15. The Laspeyres formula and weights for the preceding year are used in CPI calculations. Consumption expenditure of households derived from surveys of family
spending on goods and services are used as weights for the CPI calculation. The index covers the entire population and uses the preceding year as the base year.

16. The CPI is calculated on a monthly, quarterly and year-to-date basis. The CPI is calculated from month to month and compared with CPIs of the preceding month, the same month of the previous year and December of the preceding year and the running total from the start of the year is compared with the corresponding period of the preceding year.

17. Price indices collected on a quarterly, half-yearly and year-to-date basis are calculated by “chain linking” i.e. by multiplying the monthly CPIs together.

V. Conclusion

18. Regional CPIs bulletins are published only quarterly, unlike the national CPI bulletins, which are published monthly.