

Distr.
GENERAL

CES/AC.49/1999/21
25 August 1999

ENGLISH
Original: RUSSIAN

STATISTICAL COMMISSION and
ECONOMIC COMMISSION FOR EUROPE

INTERNATIONAL LABOUR
ORGANIZATION

CONFERENCE OF EUROPEAN STATISTICIANS

Joint ECE/ILO Meeting on Consumer Price Indices
(Geneva, 3-5 November 1999)

**SAMPLING AND DATA COLLECTION - SELECTION OF SALES OUTLETS AND
ITEMS, USE OF SCANNER DATA, ETC., IN THE AZERBAIJAN REPUBLIC**

Paper submitted by the State Committee on Statistics
of the Azerbaijan Republic

Summary

This paper contains a brief discussion of issues relating to the collection and processing of primary information on prices to compile the consumer price index.

1. International requirements and practice regarding the calculation of a consumer price index attach paramount importance to the information on prices used for this purpose. Primary information on prices is the basis of all index calculations. It is essential for the compilation of initial indicators in a system of individual price indices which are calculated as simple averages without the use of weights. This necessitates identifying, as far as possible, homogeneous groups reflecting at least the three main features characterizing the full range of consumer expenditures: geographical differentiation, variety of marketing channels and different kinds of consumer goods.

2. In recent years the Republic's economy has undergone substantial transformations: the principles regulating the economy have altered and it is no longer command-driven but market-driven. The price system has changed significantly: whereas in the days of the planned economy prices were mainly set by the State, free-market prices now predominate. The privatization of enterprises in the trade and services sector and the emergence of a large number of informal markets present statisticians with serious challenges as regards objective measurement of the levels and movements of prices for consumer goods and services and necessitate improvements in the methodology for the observation of prices.

3. The consumer price index (CPI) was officially introduced in January 1995 as the principal instrument for measuring inflation in Azerbaijan. One of the particularities of the system for compiling the CPI between 1995 and 1998 was its combination with weekly monitoring of consumer prices. The need to undertake weekly CPI calculations for a "reduced" consumer basket together with monthly calculations was caused by strong inflation, which reached a peak in 1994.

4. Decelerating inflation rates and steady deflation in 1998 made it possible for the State Committee on Statistics as of January 1999 to dispense with weekly updates and devote more attention to the monthly CPI calculations.

5. The consumer basket used for calculating the CPI is a uniform sample, for all regions of the Azerbaijan Republic, of the goods and services most frequently consumed by the public, as determined by the State Committee on Statistics. It remains unchanged over time. Items have been selected on account of their relative importance for public consumption and their representativeness in reflecting movements in prices for homogeneous goods, as well as of their continued availability for sale.

6. The consumer basket includes 268 goods and services from three main groups: food goods (94), non-food goods (142) and paid services to the population (32). Each group is made up of specific goods or small sub-groups.

7. Information on prices is collected by staff of the local statistical bodies in the capital and five major cities of the Republic. Regional indices are aggregated for the country on the basis of each region's share of the total population. Price information is gathered from all possible locations in which each good is regularly sold to the general public, including large shops, booths and department stores, and agricultural and informal markets (street trading). The outlets are located in various parts of the 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. Price observations are made at approximately 9,500 outlets - 3,500 in the capital and about 6,000 in the other cities - covering all marketing channels. The largest number of price quotations (8 to 10) is collected for the "food goods" group. The smallest number of quotations is collected for the "rent, water, heating, electricity" group, where prices and tariffs are established centrally. Six to seven price quotations are obtained on average for each of the other groups. In the selection of key enterprises in the services sector, attention has been given to those offering the public the largest range of services.

8. The fact that the consumer market is flooded with every possible kind 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 one and the same type of good (different producer/countries, all kinds of imitations, goods with expired shelf lives, etc.) makes for a wide spread of prices both in the capital and especially in the provinces. This applies both to food goods and to non-food items.

9. Another factor - the steady rise in the well-being of the population - has a positive influence on the system of price collection, since the outlets to be covered are gradually shifting with the increase in the number of specialized shops or supermarkets offering a large selection of high-quality goods throughout the year and with free access to the price of any good on sale in any packaging.

10. In sampling a particular kind of good, preference is given to an item that will be on sale in subsequent months. Goods are selected as being characteristic of the typical consumer, and not on the basis of the price collector's own personal taste. The item selected is described in detail in the price collector's note book. If there is a quality change or a new product appears, adjustments are immediately made in the range of goods covered or the retail outlet is altered. If a particular type or kind of good disappears, two principal methods are used to ensure continuity in the calculation of the price indices:

- Replacement of the representative good or service;
- 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).

11. Records are kept of the actual price of a good which is freely available for sale (excluding goods sold at preferential rates) and paid for in cash. The recorded price includes VAT, excise duty and other direct taxes. Prices for "black market" items, purchases of goods under credit arrangements and goods produced for own consumption, as well as the trading in of old items for new ones, are not taken into account. Standard nationwide prices where regulated centrally, are obtained each quarter from the relevant organizations. This group includes the prices for:

- Electricity, natural gas, water; and
- Rail and air transport, postal services and communications.

The prices for:

- Education; and
- Medical treatment

are established in proportion to the expenditures taken from family budget surveys.

12. Goods with maximum and minimum prices are sampled in proportion to their respective shares in total sales. For each good, enough prices are recorded to make a representative determination of its average price. The average price of a good is defined as the weighted average arithmetic value.

13. In the context of stabilized prices, there is a greater need for high-quality information, and the rules governing price collection and the requirements concerning the replacement of goods and trade enterprises are more strict.

14. Beginning in 1999 the regions have not simply supplied the Statistical Committee with one general report monthly from all price collectors covering all goods and services (380 items); each price collector sends his own report weekly giving prices for food goods (112 items) and at the end of the month giving prices for the whole list of goods and services covered. To process this information the State Committee's Price Statistics Division has created special tabular files for each region to store price data for the month. The weekly price information is carefully checked as it arrives and is entered on PCs. If errors or sharp price changes are detected, the staff of the Price Statistics Division contact the regional price collectors by telephone and seek clarification of all the factors giving rise to such changes, and they calculate the average prices over the four-week period by area at the end of the month only when they are sure of the accuracy of the information obtained from all price collectors. The monthly information processed in this way for the whole republic (2,300 records) for the preceding month constitutes the reference-period data, and that for the current month is used as the reporting-period data for calculating the CPI.

15. The State Committee on Statistics bears responsibility for the quality and reliability of CPI calculations. For the consumer basket, of course, the product specifications are quite broad and the comparability criteria not too stringent. In order to eliminate any differences in the range of goods covered and especially any varying treatment of the services provided to the population, regional conferences of price collectors are held twice a year to adopt a uniform approach to dealing with these important issues. Such conferences are especially important at the end of the year, when arrangements are made to change the reference-period weights.

16. Recent household budget surveys show that, as the population's standard of living has risen, the expenditure weights for the group of non-food goods and services (health care, education, transport, etc.) have increased relative to the expenditure weight for food items. The share of food products in 1998 amounted to 64% of the consumer basket, as against 80.1% in 1997. This means that it will be possible only in part to smooth out the negative influence of seasonal goods on the CPI. People in the Azerbaijan Republic - a country with a hot climate - typically consume large quantities of fresh fruit and vegetables in the summer and autumn, when prices for such items are low. The price difference as compared with the winter period is as much as 500 to 1,000%.

17. Azerbaijan does not have a scientifically-based methodology for taking account of these seasonal components. A correlation is made at the point when prices are recorded (weighted average prices are calculated to reflect the gradually increasing quantities of a "new" item supplanting an "old" one in total sales) or, when compiling the CPI, the relative change in price for a

seasonal good which has disappeared from the market is determined by means of a relative indicator calculated for the specific product group. Practice shows that each seasonal good has to be treated on an individual basis.

18. A no less important issue is that of updating the consumer basket: replacement of representative goods or disappearance of representative services provided to meet various everyday needs, in the cultural field, etc.

Conclusion

19. The State Committee on Statistics is continuing to work on improving the current methodology of price collection and compilation of the CPI. A most important area of future work, in our view, is the exchange of experience on such issues as:

- Replacement of representative goods being observed in the event of their disappearance;
- Replacement of representative services provided for everyday needs, in the cultural field, etc., when they disappear for a lengthy period, as well as the recording of services of the same kind but of different quality;
- Dealing with problems related to the seasonal nature of goods when calculating consumer budgets;
- Compilation of forecasts of the level of inflation and price rises, including the long-term outlook in EU countries.
