People's Republic of China

A: Identification

Title of the CPI: Consumer Price Index

Organisation responsible: National Bureau of Statistics of China

Periodicity: Monthly

Price reference period: 2010 = 100

Index reference period: Previous month = 100, Previous December = 100, same month of previous year = 100

Weights reference period: 2011 – 2015

Main uses of CPI: Indexation of wages, pensions and/or social security payment, main inflation indicator used for monetary policy, deflate household expenditures in national accounts, macroeconomic modelling and other analytic uses.

B: CPI Coverage

Geographical Coverage

Weights: Nation-wide

 Price collection: Nation-wide

Population coverage: Resident households of nationals.

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;
- Housing maintenance, minor repairs;
- Major repairs, conversions and extensions to owner occupied housing;
- 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);

- Social transfers in-kind of goods and services from government and No-profit institutions serving households;
- Expenditures abroad

Consumption expenditure excludes:

- Purchase of owner-occupied housing;
- Mortgage repayments;
- Mortgage interest;
- 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;
- Second hand goods purchased;
- Investment-related expenditures (e.g. purchase of shares/stocks)

C: Concepts, definitions, classifications and weights

Definition of the CPI and its objectives: Consumer Price Index reflects the trend and degree of changes in prices of consumer goods and services purchased by urban and rural residents, and is a composite index derived from the urban consumer price index and the rural consumer price index. Consumer price index can be used to analyze the impact of consumer price change on actual expenditure for living costs of urban and rural residents.

Definition of consumption expenditures: Consumption expenditure refers to total expenditure made by the sample households in daily life; such expenditure is classified into eight categories. Beneficence of commodities and services is also included in the consumption expenditures. Both money expenditure and expenditure in kind are included in consumption expenditure (whether purchased, from own production, being given and/or paid).

Classification: National classification of consumption expenditure

Weights include value of consumption from own production: Yes

Sources of weights: Household expenditure surveys and consumer surveys that are conducted every five years and cover around 100,000 households, including 40,000 households in urban areas and the remaining in rural areas. The households also complete a diary of purchases for that year.

Frequency of weight updates: Every 3-5 years

The primary source of information for the index weights are the urban and rural household **Price updating of weight reference period to the index reference period:** Yes

Weights for different population groups or regions: Weights are computed for urban areas and rural areas.

D: Sample design

Sampling methods:

Localities: Cut-off sampling (the elements with the highest sales or value of other auxiliary variable are included into the sample)

Outlets: Cut-off sampling (the elements with the highest sales or value of other auxiliary variable are included into the sample)

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: Annual

Outlets: Continuous (on a rotating basis)

Products: Continuous (on a rotating basis)

Criteria used for determining the optimal sample sizes and the coverage of localities, outlets, items and variety samples: The NBS Survey Offices of various municipalities and counties do research local market to understand the situation with respect to the sales of all categories of goods and services and then sort all kinds of shops (grocery stores, department stores, supermarkets, convenience stores, professional markets, bazaars, services outlets, etc) by sales from big sales outlets to small ones.

Based on this ranking, interval sampling is conducted according to required number of survey points. Price survey points are selected from those shops, supermarkets, fairs and service outlets with complete offer and significant sales.

For mega cities and big cities, 5+ bazaars and 3+s integrated supermarkets are selected; for middle sized cities, 3+ bazaars and 2+ integrated supermarkets are are selected; for small cities and counties, 2+ bazaars and 1+ integrated supermarkets are selected. For each product specification, 3+ price survey points should be selected for big cities, 2+ should be selcted for middle sized cities, and 1+ must be included for small cities and counties.

Since the number of varieties varies accrosss outlet and over time it is difficult to dind items with identical specifications and maintain price consistency across different outlets and over time. To solve the problem, items with similar specifications can be used to replace the previous ones or a number of specifications cab be added as appropriately. Finally, local survey offices may increase the number of outlets where prices are collected in the locality.

Representative specifications are selected on the basis of following proinciples: 1) items with significant share in consumption expenditure; 2) item specifications whose price trend and range are strongly representative for other items not included in the basket; 3) in the case of similar market shares, item specifications that have big quality difference and low correlation in price changes are preferable selected to represent the same basic heading; 4) item

specifications with promising production and sales; 5) industrial products that are labelled with trademarks, producing areas and classes.

E: Data Collection

Approximate number of localities, outlets and price observations: Localities: 500 cities and counties of the 31 provinces (autonomous regions and municipalities), Outlets: 373,000, Price observations: 1,814,000

Frequency with which prices are collected: For regular goods and services, prices are collected two to three times per month; for those items whose prices change frequently (e.g. perishable items – fruits, vegetables, eggs, poultry, meat and fish), prices are collected every five days; for industrial products prices are collected 1 to 3 times a month; for those items whose prices are controlled by the government (central or local) such as rent, electricity, public transportation, and drinking water and those with stable prices, prices are collected once every month.

Reference period for data collection: Month.

Methods of Price Collection

- Personal data collection

Treatment of:

Discounts and sales prices: Different methods are adopted in different situations

Black market prices: Not collected.

Second hand purchases: Not included.

Missing or faulty prices: Extrapolation by using the change of the other prices for the same item, re-weighting of the non-missing prices.

Period for allowing imputed missing prices: The last observed price is used one more month. A replacement item should be priced thereafter.

Disappearance of a given type or quality from the market: A replacement item is selected

Quality differences: Direct comparison, direct quality adjustment, implicit quality adjustment.

Appearance of new items: New items are included in the CPi basken if and when they have significant share in household expenditure survey.

Treatment of seasonal items and seasonality

Items that have a seasonal character and their treatment: The fixed weights approach is adopted for fresh fruit and vegetables.

Seasonal food items: Seasonal food items are included in the CPI using fixed weights approach.

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: The method used to impute price development in out-of season periods is carrying forward the last observed price and impute the price by using price development of in-season products.

Treatment of housing

Treatment of owner-occupied housing: Rental equivalence approach

Types of dwellings covered by the rent data: The types of dwellings covered by the rent data are public rental housing and private rental housing.

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: The index is Laspeyres-type annually chained index.

$$L_t = L_{t-1} \times \frac{\sum P_t Q_{2010}}{\sum p_{t-1} Q_{2010}}$$

Formula of aggregating regional/population group indices into national index: National index is acquired by aggregating the urban price index and rural one, and by using household's consumption expenditure as weights.

Seasonally adjusted indices: No

Software used for calculating the CPI: CPI10 (software developed by NBS)

G: Editing and validation procedures

Control procedures used to ensure the quality of data collected: Price collections are checked for minimm/maximum values. The CPI compilation computer program highlight sprice fluctuations exceeding specified ranges that are investigated. Abnormal price quotations are referred back to the price collectors.

Control procedures used to ensure the quality of data processed: Provincial, city price indices are compared with each other as an additional check of quality.

H: Documentation and dissemination

Timeliness of dissemination of the CPI data: 9 days after the end of the reference month.

Level of detailed CPI published

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

Separate indices published for specific population groups: Consumer prices for urban and rural areas, for food and non-food items and for consumer goods and services.

Type of products for which average prices are calculated and disseminated: Average price of food products (Rice, Flour, Soy Products, Peanut Oil, Soybean Oil, Rapeseed Oil, Pork, ,Beef, Mutton, Chicken, Ducks, Eggs, Live Carps, Live Grass Carp, Hairtails, ChineseCabbage, Rapes, Celeries, Cucumbers, Tomatoes, Kidney Beans, Potatoes, Apples, Bananas) in 50 cities,.

Documentation

Publications and websites where indices can be found: http://www.stats.gov.cn/english/

Publications and websites where methodological information can be found: How Statistical Data are Produced – CPI.
http://www.stats.gov.cn/english/statisticalstudio/t20101025_402786908.htm

I: Other Information

Reported by the country in 2012.