



REPUBLIC OF THE PHILIPPINES
PHILIPPINE STATISTICS AUTHORITY BOARD

**PSA Board Resolution No. 15
Series of 2021**

**APPROVING THE REBASING OF THE CONSUMER PRICE INDEX (CPI) FOR
ALL INCOME HOUSEHOLDS FROM BASE YEAR 2012 TO BASE YEAR 2018**

WHEREAS, PSA Board Resolution No 01, Series of 2017–146 (Approving the Synchronized Rebasing of Price Indices to Base Year 2006), mandates the rebasing of the price indices every six years;

WHEREAS, the Consumer Price Index (CPI) is an indicator of the change in the average prices of goods and services commonly purchased by consumers relative to a base year;

WHEREAS, the current commodities in the market basket of the CPI are the commonly purchased/availed of by consumers in 2012. However, changes have taken place over a period of six years affecting the relevance of the commodities in the market basket;

WHEREAS, rebasing the CPI periodically is necessary to ensure that the CPI market basket continues to capture goods and services commonly purchased by households over time; to update expenditure patterns of households; and to synchronize its base year with 2018 base year of the Gross Domestic Product and other indices produced by PSA;

WHEREAS, the Interagency Committee on Price Statistics in its meeting on 25 October 2021 agreed to recommend to the PSA Board the proposed base year and methodology (Annex BR 15-20211109-01) in rebasing the CPI for all income households with the following details to wit:

- 1) The base year is 2018;
- 2) The 2018 Family Income and Expenditure Survey is the source of data on expenditure weights for the 2018-based CPI;
- 3) The weights for the 2018-based CPI are computed as the proportion of expenditure for commodity/group of commodities to the total expenditure for the Philippines during the base year;
- 4) The commodities included in the market basket are the modal commodities that appeared to be the most commonly purchased by households based on the results of the 2021 Survey of Key Informants;

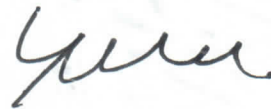
- 5) The 2020 Philippine Classification of Individual Consumption According to Purpose is adopted partially in the classification of commodities; and
- 6) The index computation uses the same methodology as that of the 2012-based CPI as follows:
 - a) arithmetic mean of prices from sample outlets for the average price of a commodity;
 - b) geometric mean of price relatives of sub-items for item level index; and
 - c) weighted arithmetic mean for higher level price indexes.

NOW, THEREFORE, BE IT RESOLVED AS IT IS HEREBY RESOLVED, that the PSA Board approved the proposed base year and methodology in rebasing the CPI for all income households with details mentioned above.

RESOLVED FURTHER, that the PSA shall:

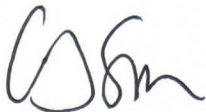
- 1) Start releasing the 2018-based CPI for all income households in December 2021 covering the period January 2018 to November 2021, and every five (5) days after the reference month starting with the January 2022 series;
- 2) Continue releasing the 2012-based CPI for all income households until December 2021 series;
- 3) Backcasted values of the 2018-based CPI for all income households from January 1957 to December 2017 will be completed in February 2022.

Approved this 9th day of November 2021, in Metro Manila.



KARL KENDRICK T. CHUA
Socioeconomic Planning Secretary
National Economic and Development Authority
Chairperson, PSA Board

Attested by:



DENNIS S. MAPA, Ph.D.
Undersecretary
National Statistician and Civil Registrar General
Philippine Statistics Authority
Chairperson, PSA Board Secretariat

METHODOLOGY IN REBASING THE CONSUMER PRICE INDEX TO BASE YEAR 2018

1. Identification of the Base Year

The base period is the period, usually a year, at which the index number is set to 100. It is the reference point of the index number series. The Consumer Price Index (CPI) is now rebased to 2018 base year from the current 2012 base year.

Rebasing the CPI to base year 2018 is in accordance with the PSA Board Resolution No.1, Series of 2017-146, which approved the synchronized rebasing of the price indices to base year 2006 and every six (6) years thereafter.

2. Determination of the Market Basket

Market basket refers to a sample of goods and services commonly purchased by the households.

To determine the commodities that will form the market basket for the 2018-based CPI, the Survey of Key Informants (SKI) was conducted in March 2021. The survey, which was conducted nationwide to store managers, sellers or proprietors, obtained information on the most commonly purchased of goods and availed of services by the households.

The commodities included in the 2018-based CPI market basket are the modal goods and services that appeared to be the most commonly purchased/availed of by households.

The commodities are grouped/classified according to the 2020 Philippine Classification of Individual Consumption According to Purpose (PCOICOP) which is based on the United Nations COICOP.

3. Determination of the Household Expenditure Patterns (Weights)

Weight is a value attached to a commodity or group of commodities to indicate the relative importance of the commodities or groups of commodities in the market basket.

The weights for the 2018-based CPI were derived from the expenditure data of the 2018 Family Income and Expenditure Survey (FIES). The weight for each commodity/group of commodities is the proportion of the expenditure of commodity/group of commodities to the total national expenditure. The sum of the weights of the commodity groups at the national level is equal to 100.



4. Monitoring of Prices of Commodities in the Market Basket

Collection of data for the CPI is done by the provincial staff of the Philippine Statistics Authority (PSA).

Prices of petroleum products in the National Capital Region (NCR) and in provinces/selected cities are monitored on a weekly basis. Prices for all other commodities except for food and non-alcoholic beverages in NCR which are monitored on a weekly basis, are collected twice a month. First collection phase is done during the first five days of the month, while the second phase is done on the 15th to 17th day of the month.

Data are collected from the sample outlets (outlets or establishments where prices of commodities/services are collected or quoted) which were chosen using the following criteria:

- a. Popularity of an establishment along the line of goods to be priced - this means the sample outlet is publicly noted in the locality for selling goods included in the CPI market basket and the outlet is patronized by a large segment of the population.
- b. Consistency and completeness of stock

Consistency of stock - the outlet has a constant, steady or regular stock of commodities listed in the CPI market basket as well as of those commodities of the same kind and belonging to the same commodity group.

Completeness of stock- the sample outlet carries in its stock most, if not all, of the items included in the CPI market basket relative to the other outlets in the area.

- c. Permanency of outlet - the outlet is an established store or stall in the market area. It should not be an ambulant or transient vendor so that the collection of data can still be done for the succeeding survey rounds.
- d. Geographical location- the outlet is conveniently located and is accessible to the majority of consumers in the area.

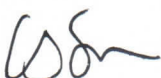
5. Computation of the CPI

Below are the steps in the computation of CPI using 2018 as the base year:

Step 1: Compute the monthly average price for each commodity

$$\text{Monthly Average Price of Commodity} = \frac{\text{Price for Outlet 1} + \text{Price for Outlet 2} + \dots + \text{Price for Outlet k}}{k}$$

where: k = number of outlets for each commodity



Step 2: Compute the price relative (PR) for each commodity

- At the Base Year

$$PR = \frac{\text{Current Month's Average Price}}{\text{Annual Average Price in 2018}} \times 100$$

- After the Base Year

$$PR = \frac{\text{Current Month's Average Price}}{\text{Previous Month's Average Price}} \times 100$$

Step 3. Compute the index for 6-digit or Item Index ($I_{i(6)t}$)

- At the Base Year

$$I_{i(6),t} = \text{Geometric Mean}(PR_i) * 100$$

- After the Base Year

$$I_{i(6),t} = \text{Geometric Mean}(PR_i) \times I_{i(6),t-1}$$

where: $I_{i(6),t-1}$ is the Item Index at time t-1

Step 4: Compute the index for 5-digit or Sub-class Index ($I_{j(5),t}$)

Use of Weighted Arithmetic Mean

$$I_{j(5),t} = \frac{\sum_{i=1}^n w_{i(6)} I_{i(6),t}}{\sum_{i=1}^n w_{i(6),t}}$$

where: n is the number of items under Sub-class j;
 $w_{i(6)}$ refers to the weight of Item I and;
 $I_{i(6),t}$ is the Item Index at time t

Step 5: Compute the higher level index (Lower digit disaggregation)

Same formula as the Sub-class level index computation, except that the commodity level refers to the higher commodity levels.

