

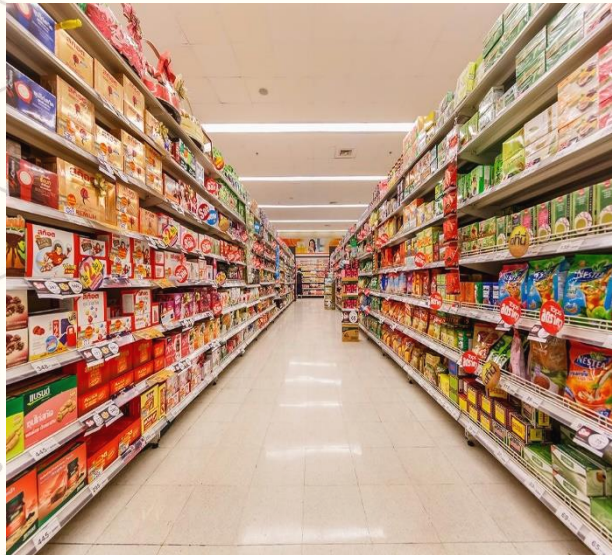
Shedding Light on Inflation

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OUTLINE OF PRESENTATION

I

Consumer Price Index (CPI)

II

Components of CPI

III

**Inflation Rate and Other Price Statistics
Derived from CPI**

IV

Data Dissemination

What is Consumer Price Index (CPI)?

- CPI measures the changes in the average retail prices of goods and services or commodities from the base year.
- Current base year is 2018

I. CONSUMER PRICE INDEX

Example:

- The **March 2024 CPI** for all income households for ALL Items is **125.6**.
- Average prices of commonly purchased goods and availed services by All Income Households have increased, on the average, by **25.6** percent in **March 2024** relative to their average prices in 2018 (base year).

II. COMPONENTS OF CPI

1. Selected Commodities (Market Basket)

a. Number of Commodities

- A total of **16,146** unique commodities are monitored monthly starting 2022.
- Number of commodities in the market basket by domain ranges from **217** (Davao Occidental) to **760** (NCR)
- Domains are up to HUC level



II. COMPONENTS OF CPI

1. Selected Commodities (Market Basket)

b. Selection of Commodities

- results of the Commodity and Outlet Survey (**COS**) or the Survey of Key Informants (**SKI**)

c. Classification of Commodities

- based on the 2020 Philippine Classification of Individual Consumption According to Purpose (**PCOICOP**)
- covers **13** Major Commodity Groups or Division

II. COMPONENTS OF CPI

1. Selected Commodities (Market Basket)

c. Classification of Commodities – cont'd.

Levels of the 2020 Philippine Classification of Individual Consumption According to Purpose (**PCOICOP**)

No. of Digits	Level Description	Example	
2	Division	01	Food and Non-Alcoholic Beverages
3	Group	01.1	Food
4	Class	01.1.1	Cereals and Cereal Products
5	Sub-Class	01.1.1.1	Cereals
6	Item	01.1.1.12	Rice
7	Sub-item	01.1.1.121	Well-milled

II. COMPONENTS OF CPI

1. Selected Commodities (Market Basket)

c. Classification of Commodities – cont'd.

Major Commodity Groups (Divisions) Based on the 2020 PCOICOP

01 – Food and non-alcoholic beverages	08 – Information and communication
02 – Alcoholic beverages and tobacco	09 – Recreation, sport and culture
03 – Clothing and footwear	10 – Education services
04 – Housing, water, electricity, gas and other fuels	11 – Restaurants and accommodation services
05 – Furnishings, household equipment, and routine household maintenance	12 – Financial services
06 – Health	13 – Personal care and miscellaneous goods and services
07 – Transport	

2. Sample Outlets

a. Number of Sample Outlets

- establishments or retail outlets where prices of commodities are collected or quoted
- 6 outlets per province in Areas Outside NCR, and varied for NCR

2. Sample Outlets

b. Criteria for Selecting Sample Outlets

- popularity on the items to be priced
- consistency and completeness of stock
- permanency of outlet
- accessibility to greater segment of population

II. COMPONENTS OF CPI

c. Frequency of Price Collection from Sample Outlets

Area/Frequency	Commodity
National Capital Region (NCR)	
Weekly	food, processed food, beverages, and tobacco, agricultural products, and fuel products
Bi-weekly	other non-food
Monthly	meals, rentals, movie, and other services
Semestral (every start of school year/semester)	tuition fees
Areas Outside NCR	
Weekly	fuel products
Bi-weekly	food and other non-food
Semestral (every start of school year/semester)	tuition fees

II. COMPONENTS OF CPI

c. Frequency of Price Collection from Sample Outlets

Area/Frequency	Commodity
Central Office (PSD)	
Bi-weekly	Air Fare, Ship Fare, Delivery of Parcel and Letters, Bet for Lotto, Fee for Birth Certificate, Toll fee
Monthly	For NCR: Train Fare, Bus Fare, Ship Fare, Electricity Rate, Water Supply Rate

3. Weight

- A value attached to a commodity or group of commodities to indicate the **relative importance** of the commodity or group of commodities to consumers
- Computed as the **percent share of the commodity** to the total expenditure of the households
- Currently based on the results of the 2018 Family Income and Expenditure Survey (**FIES**)

II. COMPONENTS OF CPI

3. Weight

Top Five Major Commodity Groups with the Highest Weight, Philippines

Major Commodity Group/Division	Weight
1. Food and non-alcoholic beverages	37.75
2. Housing, water, electricity, gas and other fuels	21.38
3. Restaurants and accommodation services	9.62
4. Transport	9.03
5. Personal care and miscellaneous goods and services	4.46

II. COMPONENTS OF CPI

3. Weight

Top Five Food Commodities with the Highest Weight, Philippines

Food Commodity	Weight
1. Rice	8.87
2. Meat and other parts of slaughtered land animals	6.43
3. Fish and other seafoods	5.66
4. Milk, other dairy products and eggs	2.90
5. Vegetables, tubers, plantains, cooking bananas and pulses	2.80

4. Base Year/Base period

- A year at which the index is set to 100
- The current base year is 2018 (the weight of the current CPI is based on the 2018 FIES)
- Rebasing of the CPI is every six (6) years
 - *based on PSA Board Resolution No. 1, Series of 2017-145 [Approving the Synchronized Rebasing of Price Indices to Base Year 2006 and every six (6) years thereafter]*

5. Index Computation

a. Item Index or 6-Digit Index ($I_{i(6),t}$)

- **At Base Year**

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

- **After the Base Year**

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

where: $I_{i(6),t-1}$ is the Index for the i th item at time $t-1$
 PR_i is the Price Relative of the i th item at time t

5. Index Computation

b. Sub-class Index or 5-Digit Index ($I_{j(5),t}$)

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

where: n is the number of items under Sub-class j
 $w_{i(6)}$ refers to the weight of Item i

5. Index Computation

c. Higher Level Index (Lower-Digit Index)

- Same formula as the Sub-class level index (5-digit index), except that the commodity level refers to the higher commodity levels (lower digit levels).

1. Inflation Rate

- Measures the year-on-year change of CPI

formula:

$$IR_t = \frac{CPI_t - CPI_0}{CPI_0} \times 100$$

where:

IR_t = Inflation rate for the current year and month

CPI_t = CPI of the current year and month

CPI_0 = CPI of the same month of previous year

1. Inflation Rate

- Inflation rate can be **positive** or **negative (deflation)**
- A **positive inflation** rate means that the average prices of commodities have **increased** from their average prices in the previous year.

Example:

March 2024: 3.7%

1. Inflation Rate

- A **negative inflation (deflation)** rate means that the average prices of commodities have **decreased** from their average prices in the previous year.

Example:

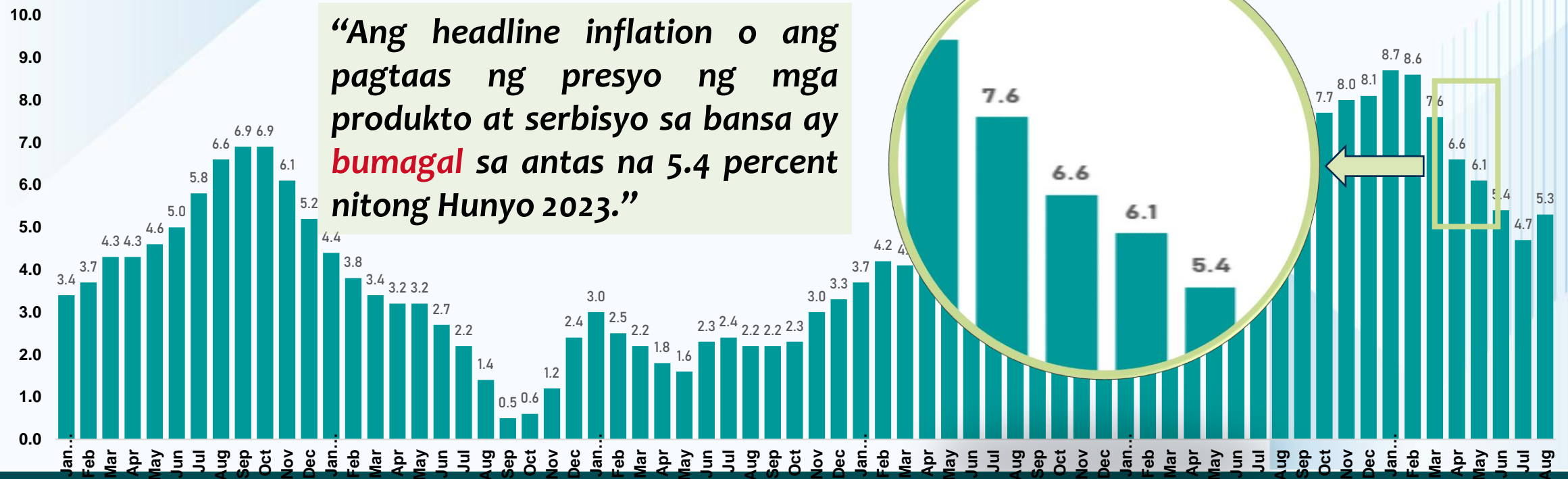
September 2015: -0.4%

III. Inflation Rate and Other Price Statistics Derived from CPI

1. Inflation Rate

A **lower positive inflation (deceleration)**:

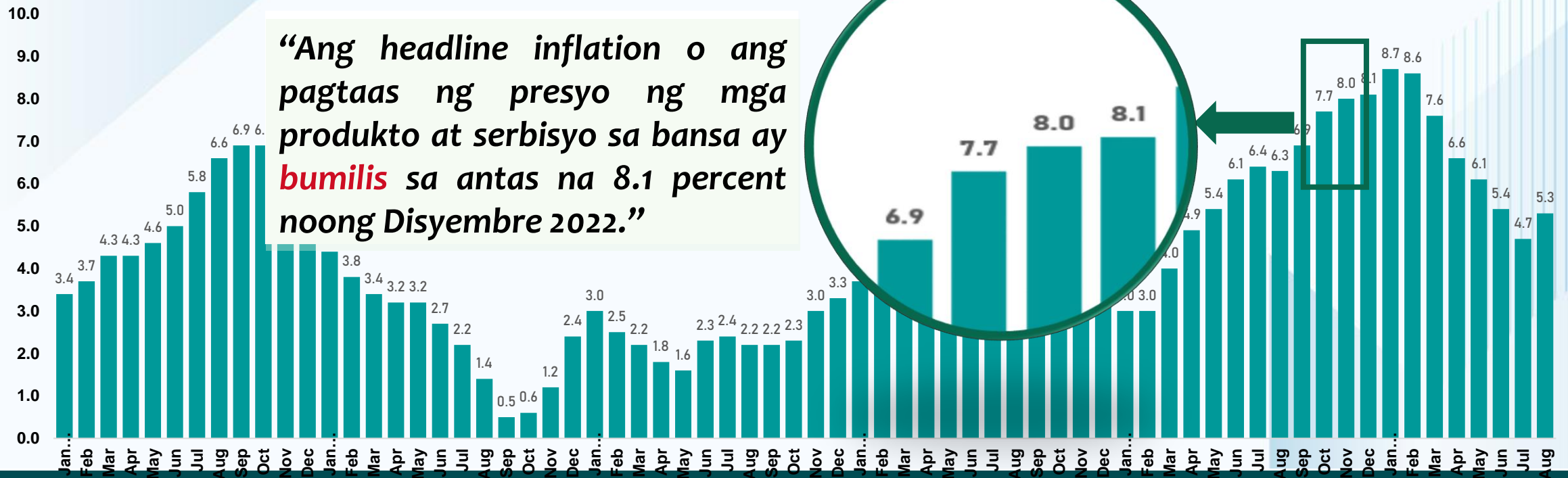
- means that the average prices of commodities have **increased** annually but at a **slower rate** compared with its annual growth in the previous month



III. Inflation Rate and Other Price Statistics Derived from CPI

1. Inflation Rate

- A **higher positive inflation (acceleration)** means that the average prices of commodities have **increased** annually at a **faster rate** compared with its annual growth in the previous month.



III. Inflation Rate and Other Price Statistics Derived from CPI

1. Inflation Rate

- A **constant inflation** means that the average prices of commodities have **increased/decreased** annually at the **same rate** as its annual growth in the previous month.

“Ang headline inflation o ang pagtaas ng presyo ng mga produkto at serbisyo sa bansa ay nanatili sa antas na 3.0 percent noong Pebrero 2022.”



2. Core Inflation

- A measure of inflation that captures the permanent component of the inflationary process that can be influenced by monetary policy.
- It is estimated by **excluding the volatile items** that are in the computation of the headline inflation.
- The identification of excluded items was done by BSP, and these are selected food and energy items.

III. Inflation Rate and Other Price Statistics Derived from CPI

2. Core Inflation

Excluded Items in the Core Inflation

Code	Commodity Group	Weight
01.1.1.1	Cereals (rice and corn)	9.3515
01.1.2.2	Meat, fresh, chilled or frozen	4.8219
01.1.3.1	Fish, live, fresh, chilled or frozen	4.1656
01.1.6.1	Dates, figs and tropical fruits, fresh	1.3415
01.1.7.4	Other vegetables, fresh or chilled	0.6942
01.1.7.2	Fruit-bearing vegetables, fresh or chilled	0.9985
04.5.1.0	Electricity	4.5548
04.5.2.2	Liquefied hydrocarbons	1.2732
07.2.2.1	Diesel	0.5976
07.2.2.2	Gasoline	1.7664
TOTAL		29.5653

3. Purchasing Power of the Peso (PPP)

- shows how much the peso in the base year (2018) is worth in a given year.

formula:

$$PPP = \left(\frac{1}{CPI} \right) \times 100$$



Note: As CPI increases, PPP decreases

3. Purchasing Power of the Peso (PPP)

Example

- The PPP in March 2024 is 0.7962.
 - ✓ This means that PhP 100 in March 2024 can only buy goods and services that is equivalent to PhP 79.62 in 2018.

V. DATA DISSEMINATION

- Through **press conferences** and **press releases** 5 days after the reference month.
- The data are available at the national, regional, provincial, and highly urbanized city levels.



Other Generated Data on Inflation:

- Inflation for the Bottom 30 Percent Income Households
- Seasonally-Adjusted Inflation for All Income Households

V. DATA DISSEMINATION

- Data are available in the PSA website and in the OpenStat through the following links and QR codes:

Link

For CPI for All Income Households:

- <https://psa.gov.ph/price-indices/cpi-ir>
- https://openstat.psa.gov.ph/PXWeb/pxweb/en/DB/DB_2M_PI_CPI_2018/?tablelist=true

For CPI for the Bottom 30% Income Households:

- <http://www.psa.gov.ph/price-indices/bottom-30>
- https://openstat.psa.gov.ph/PXWeb/pxweb/en/DB/DB_2M_PI_BIH_2018/?tablelist=true

QR Code



THANK YOU!

 <http://www.psa.gov.ph>

 <http://openstat.psa.gov.ph>

 <https://twitter.com/PSAgovph>

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