Price Collection for the Consumer Price Index: a Documentation
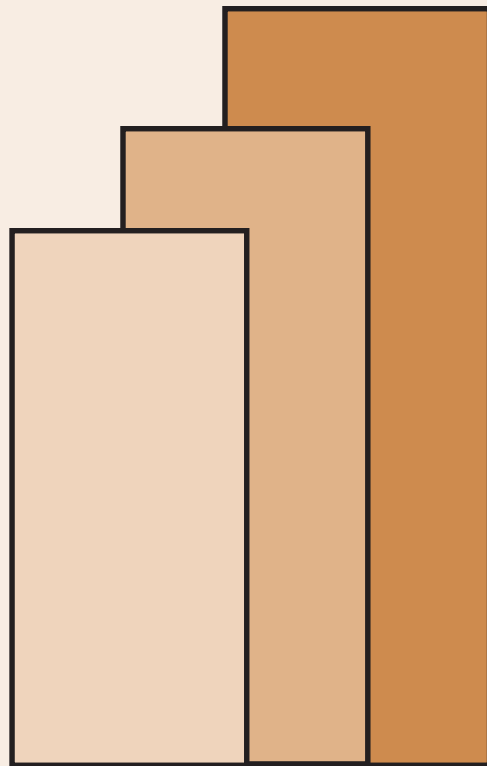
Carmelita N. Ericta and Rosie B. Sta. Ana

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Price Collection for the Consumer Price Index: A Documentation[1]

Carmelita Ericta and Rosie Sta. Ana[2]

Abstract

The quality of poverty estimates relies heavily on the data sources. One of the sources of data for poverty estimation in the Philippines is the retail price collected by the National Statistics Office. The retail prices are used, along with or in the absence of price data of certain commodities from the Bureau of Agricultural Statistics, for costing the poverty thresholds. This report contains the procedures of collecting, monitoring, and verifying the price data. It also discusses how special items are treated.

Key words: CPI, retail price, rebasing

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I. INTRODUCTION

The National Statistics Office (NSO) conducts regularly the Survey on Retail Prices of Commodities and Services in the provinces nationwide and in selected cities. The prices that are gathered in this survey serve as inputs in the computation of the Consumer Price Index (CPI). The CPI is a major statistical series used for economic analysis and as basis in formulating economic policies. It is the principal source of information concerning trend in consumer prices and inflation rate in the Philippines.

Specifically, the CPI is use as follows:

1. As a measure of general inflation;
2. As basis for setting wages and non-wage benefits;
3. As basis for evaluating interest payments, housing rents and other contractual payments;
4. As basis for estimating real consumption and income; and
5. As a measure of the Purchasing Power of Peso.

History and Development

The NSO CPI dates back to 1945 and has undergone several revisions. Prior to that, CPI, which was then referred to as Cost of Living Index, was constructed by the Labor Statistics Division of the Department of Labor. The task of calculating the index was transferred to the Bureau of the Census and Statistics (now the National Statistics Office) on January 1, 1941.

The first series constructed by the BCS was in 1945. The Cost of Living Index series had 1941 as base year and covered Manila only. The market basket contained 66 commodities representing goods and services commonly purchased by low-income families (families living within minimum level of subsistence). This series lasted for 18 years from 1945 to 1963.

The first revision was made in 1964. New weights were based on the results of the 1961 Survey of Income and Expenditures while the average price for 1960-1962 was used as the base price. This new series was referred to as the Consumer Price Index for Low-

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[2] Administrator & Division Chief, respectively, National Statistics Office

Income Families in Manila (families whose annual income did not exceed P2,400). The market basket contained 244 items.

Subsequent revisions were done in the following years:

1965: With 1961 as base year. The series covered Manila only.

1970: With 1966 as base year. This time, CPI was computed for various income groups: Low, middle and all-income groups. The coverage was extended to all provinces. Moreover, for Manila and suburbs, CPI for high-income group was also computed.

The market basket consisted of 249 items for low-income, 368 for middle-income, 242 for high-income and 479 for all-income groups.

1976: With 1972 as base year. This CPI series was limited only to all-income households. It covered all regions and provinces in the country including the National Capital Region (NCR).

1982: With 1978 as base year. Weights were derived based on the 1975 Family Income and Expenditures Survey (FIES) results updated to 1978 prices. This series covered all-income households. The market basket contained 407 items.

1992: With 1988 as base year. Weights were derived from the expenditure data of the 1988 FIES. A market basket for each of the 13 regions was established with the number of items ranging from 384 (for NCR) to 651 (for Region IV). Unlike in previous series where the composition of the market basket was determined by a technical committee (the Inter-Agency Committee on Price Statistics), the market basket used in this series was determined through the 1985 Commodity and Outlet Survey (COS) which was conducted using the sample households of the 1985 FIES. The 1985 COS was the first survey of its kind in the country with the purpose of identifying the market basket by asking sample households the commodities and services that they consumed most of the time and the type of outlets where these commodities and services are commonly purchased or availed of.

1996: With 1994 as base year. The expenditure data from the 1994 FIES survey results were used as weights. Individual provincial and city market baskets were constructed using the results of the 1994 COS undertaken by the NSO and the results of the validation work on the availability and saleability of the items in the 1988 market basket in the different geographical areas. There were no such baskets in the 1988-based series since the regional market baskets were used for the provincial CPIs.

2000: With 2000 as base year. Updating activity actually started in October 2000. Updating of the 1994 market basket was done through an interview of key informants in various outlets as to the availability and saleability of items they sell. The expenditure data from the 2000 FIES were the basis of the new CPI weights. Final reference files (base price, market baskets and weights) were completed in 2002. Computation of the 2000 and 2001 CPI series started in October 2002.

The current series with 2000 as base year is part of the Office regular calendar of activities to update the present base year. The new series also features the use of separate provincial and city market baskets and the new set of 2000 weights also computed at the provincial and city level.

2007: With 2006 as base year. The planning and preparation for the conduct of the 2007-2008 COS began in November 2007. The survey will use the reference period June 2007 to May 2008 in asking the sample households the commodities and services most commonly consumed and purchased and the type of outlets where these commodities are commonly purchased or availed of. The survey also involves the interview of national sub samples of about 25,000 households of different income levels of the 2006 FIES. The results of the survey will provide the basis for the identification of the market basket at different income levels, i.e. upper 70% and bottom 30% which will be used in the computation of the CPI for the different income groups. It will also serve as the basis for the identification of the type of outlets for the regular monthly price survey. Unlike with the previous CPI series where the commodity groups are based on the Philippine Standard Commodity Classification (PSCC), the 2007-2008 COS adopted the order of appearance of the major divisions of the commodity groups based on the Classification of the Individual Consumption According to Purpose (COICOP). COICOP is a classification used to classify both individual consumption expenditure and actual individual consumption. It is one of the "functional" classifications designed to classify certain transactions of producers and of households. It is described as "functional" classification because it identifies the "functions" - in the sense of "purposes" or "objectives" - for which these groups of transactors engage in certain transactions. Enumeration period was conducted in June 2008.

II. SCOPE AND COVERAGE

Sampling

In terms of sampling of geographical localities for price collection, the the 2000-based CPI series covered 77 provinces and 12 selected cities. For sampling of outlets, there are about 10,000 sample outlets that are regularly visited by the price collectors nationwide. Sample outlets are establishments where prices of sample commodities/services are quoted.

The sample outlets were selected according to the following criteria:

1) *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 survey forms and the outlet is patronized by the large segment of the population.

2) *Permanency of the outlet* – the outlet to be chosen should be an established stall or store in the market area. It should not be an ambulant or transient vendor.

3) Consistency and completeness of the stock
  Consistency of stock – the outlet has a constant, steady or regular stock of commodities listed in the CPI survey forms 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 many if not all of the items included in the CPI survey forms relative to the other outlets in the area.
4) Geographical location – the outlet should be in a convenient place and is accessible to the majority if not all consumers in the area.

Items included in the CPI market basket

CPI market basket is the list of sample of goods and services that are commonly purchased and bought by an average Filipino household (Please refer to Annex A for a sample CPI market basket)

III. UPDATING THE MARKET BASKET AND WEIGHTS

CPI is an indicator of the change in the average prices of a fixed basket of goods and services commonly purchased by households relative to a base year. Prices are compared to a base year and weighted by the appropriate consumption pattern. When the basket of the reference year no longer represents what is commonly purchased by the households, the CPI becomes irrelevant and tends to give wrong market signals. Hence, it is necessary to update the CPI using a base year that reflects the typical market basket of the time.

Rebasing an index is necessary to ensure that the market continues to capture goods and services commonly purchased by households over time and to update expenditure patterns of households. Consumer taste, fashion and technology change over time causing the fixed market basket of goods and services to become outmoded. To capture such changes for a more meaningful price comparison, revision or updating of the fixed market basket, the sample outlets, the weights and the base year has to be done periodically. The CPI is an indicator that derives its usefulness in its representation of how much a typical market basket behaves over a specific time period.

This section focuses on the five steps involved in the rebasing the CPI: (1) identification of the base year (2) determination of the market basket (3) determination of household consumption patterns (4) monitoring of prices of items in the basket and (5) computation of the CPI.

1. Identification of the Base Year

   The first step in updating the CPI is choosing 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. Usually the base year should be perceived to be more

politically, economically and socially stable and it is the year when the Family Income and Expenditures Survey (FIES) which is the basis of weights is conducted.

2. Determination of the Market Basket

The second step in CPI updating is the determination of the market basket. This activity is crucial because inadequate representation of the typical basket will give wrong signals as to the behavior of prices.

The market basket used in the construction of the CPI can be drawn either from the results of the COS or Interview/Survey of Key Informants. COS is a nationwide survey undertaken by the NSO. This is conducted for the purpose of gathering data on commodities/services that a family purchases/consumes/avails of most of the time and the type of outlets where these commodities/services are purchased/availed of within the country. The results of the survey will provide the basis for the identification of the market basket at different income levels, i.e. upper 70% and bottom 30% which will be used in the computation of the CPI for the different income groups. It will also serve as the basis for the identification of type of outlets for the regular monthly price survey. In the case when the COS is not conducted, the interview or the Survey of Key Informants is being done. This is conducted nationwide in selected sample outlets by asking the sellers the commodities and specifications they sell that are saleable to the buying public.

3. Determination of the Household Consumption Patterns (Weights)

The third step in the CPI updating is assigning the weights to the commodity groups/sub-groups. This reflects the consumption priorities of households and the way they allocate resources to meet their needs based on the results of FIES. Weight is a value attached to a commodity or group of commodities to indicate the relative importance of that commodity or group of commodities in the market basket.

Each province/city is considered a domain so much so that weights were generated for each of them. This is done to account for the differences in consumption patterns because of geographical location. The weight for each item of expenditure is a proportion of that expenditure item to the total national expenditure. The total (all items) national expenditure is equal to 100. Likewise, geographical weights are also determined where the weight of the region is equal to the sum of the weights of the provinces belonging to that region. The sum of the weights for the region is equal to the national weight.

4. Monitoring of Prices of Items in the Market Basket

The next step in the updating the CPI is to establish baseline information for prices of the items in the base year and monitoring of the prices of the items on a regular basis. Detailed discussions of the price collection methodology are in Section IV.

5. Computation of the CPI/Indicators Derived from the CPI

The formula used in computing the CPI is the weighted arithmetic mean of price relatives, a variant of the Laspeyres formula with fixed base year period weights. In computing the CPI, the formula is

$$CPI = \frac{sum\ [(P_n/P_o)W)]}{sum(W)} * 100$$

where:

P_n = current price
P_o = base period price
W = $P_o Q_o$ = weights

Below are the two economic indicators derived from the CPI:

1. Inflation rate - is defined as the annual rate of change or the year-on-year change in the CPI. That is,

$$Inflation\ Rate = \frac{CPI_2 - CPI_1}{CPI_1} * 100$$

where:

CPI_2 – is the CPI in the second period
CPI_1 – is the CPI in the previous period

2. Purchasing Power of Peso (PPP) - is a measure of the real value of the peso in a given period relative to a chosen reference period. It is computed by getting the reciprocal of the CPI and multiplying the result by 100. That is,

$$PPP = \frac{1}{CPI} * 100$$

6

IV. MONITORING OF PRICES OF ITEMS IN THE MARKET BASKET

Collection of data for the CPI is done through the collective effort of the Bureau of Agricultural Statistics (BAS) and the NSO. BAS collects price data for agricultural commodities in NCR and in provincial capitals where there are BAS offices while NSO collects prices for all other commodities in all other areas.

Data are collected from the sample outlets (outlets or establishments where prices of commodities/services are collected or quoted) which were chosen according to the criteria indicated in section 2.1.2.

About 459,000 price quotations gathered throughout the country are entered into the computation of the monthly CPI.

Except for FBT in NCR and selected petroleum products in AONCR which are monitored on a weekly basis, price collection is done twice a month. First collection phase is done during the first five days of the month while the second phase is on the 15th to 17th day of the month.

1. First Collection Phase – Areas Outside the National Capital Region (AONCR)
   Prices for all commodities and cost of services must be taken from the same establishments already selected as regular price outlets. Six (6) price quotations are required for every commodity or service listed in the forms. In areas outside NCR, two (2) of these six (6) price quotations are taken from the provincial capital and the other four quotations from the sample municipalities.

2. Second Collection Phase – AONCR
   Only two (2) price quotations are required for every commodity or service listed in the forms. These are taken from the provincial capital.

3. For selected cities, six (6) price quotations are required for every commodity or service listed in the forms during the first and second collection phases.

4. National Capital Region (NCR)
   All unprocessed food items are priced every Tuesday of the reference week while all processed food items, beverages and tobacco are priced every Friday/Saturday of the reference week. Special attention is given to the pricing of highly perishable goods, e.g., fresh fish, vegetables and fruits. Prices of these goods are taken during the time of the day when most housewives do their marketing, i.e., usually before 10:00 a.m., so as to attain a reasonable degree of consistency in pricing identical groups of items in the market.

   Prices of non-FBT items are gathered during the first five days of the month and on the 15th to 17th day of each month.

5. Special Items

    Prices of some service items are gathered less frequently.

    School tuition fees are taken twice a year, every beginning of the school semester (June or July and October or November as the case may be).

    Elementary and high school tuition fees account for the monthly/annual fees. The entry is carried all through the succeeding months until the next school year.

    College fees accounts for the per semester fees. The entry is carried through the succeeding months until the next semester.

    Items for personal, recreational, medical and other services are priced semi-annually in NCR, monthly in the sample municipalities, and twice a month in the provincial capitals.

    Changes in transportation fares, once implemented, are immediately included in the computation of CPI for NCR and included in the next survey round in areas outside NCR if the implementation date falls after the survey period.

    In the case of house rentals, the same addresses or the same housing unit regardless of its occupants must be the source of data in every survey period. If the structure no longer exists or if it has ceased to be rented, an appropriate substitute should be selected. Thus, if the sample house which is to be replaced has only one bedroom then the replacement must also be a house with only one (1) bedroom. The amount of rental paid monthly by the households must exclude payments made on electricity and/or water. This survey of house rentals is done monthly.

    Prices are collected through personal interview; mail inquiry; telephone inquiry; personal observations which involve personal visits to the stores to find and record the prices marked on the items; test purchase which means buying an item for the purpose of checking the price, quality, weight/volume for its contents; or through direct inquiry from the buyers of the commodity. However, prices of some commodities are available from their price tags. In the absence of price tag, the price collector will inquire from the storekeeper the price of a particular commodity listed in the survey form. The survey of retail prices of commodities and services utilizes the following forms:

Prices Form 1-A	- Survey of Retail Prices of Agricultural Food Items
Prices Form 1-B	- Survey of Retail Prices of Processed Food Items, Beverages and Tobacco
Prices Form 1-C	- Survey of Retail Prices of Non-Food Items
Prices Form 1-D	- Survey of Costs of Fuel, Light and Water, House Rentals and Services

V. PROCESSING OF PRICE DATA

The reliability of the consumer price index to a very large extent, depends on the reliability of the price data obtained during the survey. Immediate verification of the reasonableness and reliability of prices of commodities and services in a given area for a given month is being done for each survey round. Hence, processing of price survey forms is done in the field where immediate verification of price data from outlets could be undertaken. Below are the discussions on how prices are edited and verified.

Editing of Survey Forms
Prices are edited through careful examination of price survey forms and comparison of item prices in different outlets and computation of the arithmetic average price of the commodity.

Verification of Price Data – This is done through the review of the reasonableness and completeness of price data and the accuracy in the computation of current average prices by comparing the current outlet price of a commodity and current average price of a commodity with its previous month's price in the outlet and its previous month's average price. If there is a big difference in the two average prices, the price collectors verify from the outlets where these prices were taken. They write on the survey form a remark or the necessary justification, of the marked differences in the two months average prices of a commodity.

The processing of price data for the CPI is decentralized so that each Provincial, Regional and Central Office has their own system in machine data processing. Each province/selected city uses the system for the encoding, validation and preliminary index computation. The Provincial Office then submits their edited price data to the Central Office copy furnished their respective Regional Offices. The Regional Office validates the provincial data submitted and computes the preliminary index of the region and its provinces. The Central Office validates all the provincial data and computes the final index series for the month at the national, regional and selected city levels.

VI. TREATMENT OF SPECIFIC PRODUCTS

Cars
Expenditures for cars are included in the computation of CPI weights for miscellaneous items. However, these items are not included in the collection of prices for the CPI.

Transport and airfares
Changes in land and air transportation fares, once implemented are immediately included in the computation of CPI in NCR and included in the next survey round in areas outside NCR if the implementation date falls after the survey period.

Prices of gasoline products have been deregulated. However, when prices of such products increase, those engaged in the transport sector demand for an increase in land

transportation fares. The petition for the increase in land transport fare is submitted to a government regulatory office for a decision after a series of hearings attended by the private and public sectors. The regulation applies to taxis, jeepneys and non-air-conditioned buses

Package holidays/Package tours
Package tours are included in the CPI weights for transportation and communication. Price collection for purposes of the CPI excludes these items.

Telecommunication
Residential telephone rates are gathered monthly from fixed sample outlets. Value Added Tax (VAT) is included in its monthly rate.

Government postage charges are regulated.

The charge for internet surfing is priced twice a month in NCR and in the provincial capitals and monthly in the sample municipalities.

Utilities
Electricity and water rates are collected once a month in NCR and sample municipalities and twice a month in the provincial capitals.
Normally, taxes are already included in pricing commodities and services (VAT and service charges).

Package of Meals
Package of meals that include meals eaten outside the home are priced monthly in NCR and sample municipalities and twice a month in the provincial capitals.

Second-hand goods
Price collection for purposes of the CPI exclude items sold at second-hand stores.

Durable goods bought on credit
Durable furniture and equipment whether bought in cash or on credit are priced twice a month in NCR and in the provincial capitals and monthly in the sample municipalities.

Health
Medical services are priced on a semestral basis in NCR, monthly in the sample municipalities and twice a month in the provincial capitals.

Education
School tuition is taken twice a year, every beginning of the school semester (June or July and October or November as the case may be).

Elementary and high school tuition fees account for the monthly/annual fees. The entry is carried all through the succeeding months until the next school year.

College fees account for the per semester fees. The entry is carried through the succeeding months until the next semester. Tuition fees in schools and universities are regulated.

Interest Rates
In the computation of the CPI in the Philippines, interest rate is not included as one of the commodity items.

Owner-Occupied Housing
Imputed rents from owner-occupied housing are not included in the monthly price survey.
Rental under the Housing and Repairs group is represented by a measure of actual rental rates.
Rental rates are collected from fixed residential units that are actually rented at the time of the survey. The survey of rental rates is done monthly.
Minor repair is represented by the costs of maintaining the house.
The maintenance cost includes cost of construction materials and wages of carpenters, electricians and plumbers.

Regulated Prices
In general, prices of commodities and services in the CPI are not regulated. However, during periods of calamity and emergency, a law is enforced to protect consumers' welfare. Republic Act Number 7581 provides that it is the policy of the State to ensure the availability of basic necessities and prime commodities at reasonable prices at all times without denying legitimate business a fair return on investment. It is also a declared policy of the State to provide effective and sufficient protection to consumers against hoarding, profiteering and cartels with respect to the supply, distribution, marketing and pricing of said goods, especially during periods of calamity, emergency, widespread illegal price manipulation and other similar situations

VII. PROBLEMS IN RETAIL PRICE COLLECTION

A situation arises when one or more specific items in the market basket "disappear" in one or more outlets during the survey period, temporarily or permanently. When this situation happens, several measures are done.

1. Temporary disappearance (e.g., out of stock)
When the demand of a particular item becomes nil causing the retirement of its stocks from the market, the last price quotation of the absent item is carried unchanged until stock and its price is again available. This measure, however, is done only if the item is not available within three (3) months for non-food and processed food items. If after 3 months the item is still not available in a particular outlet but available in other outlets, the price of the item is quoted from the nearest or other outlet chosen using the criteria of outlet selection. The substitute outlet for the lost item becomes the permanent sample

outlet (for that particular item only) even though the lost item becomes available again in the original sample outlet after the third month.

For agricultural food items, missing prices are imputed using the growth rate of price changes of sample items from the other outlets or growth rates of price changes of items belonging to the same group of items where the missing price is observed.

For items that disappear from the basket due to hoarding, late arrivals of stocks or due to seasonality, the last available price quotation is also carried unchanged until the item reappears.

The field personnel are instructed to indicate reason for disappearance.

2. Permanent disappearance
A disadvantage of the Laspeyres formula used in the computation of the CPI is that base year quantities instead of current quantities are used and that the market basket is not currently updated so that some of the items may no longer exist or are no longer commonly bought due to technological change or changes in consumer taste and fashion. The CPI suffers from this limitation. Hence, when this situation happens, the following measures are taken.

a) If a certain specified item disappeared for more than three (3) months in the municipality, the price collector is instructed to get an appropriate substitute for that item only in that municipality on the 4th month . For example, if Ligo, Sardines in tomato sauce, 7.5 grams could not be found in any possible substitute outlets in the area, the price collector can get Hakata or 555 sardines in tomato sauce, 7.5 grams. The substitution of commodity specifications should only take place on the fourth month. However, the original specifications of that item which still exists in other sample areas should be maintained.

The overlap and linking method is used in pricing a new and representative item that is usually connected with the changes in specifications. This is done by a parallel price survey for this representative item (according to the old and new specification) but only prices according to the old specification are taken into account in the computation of the index. This usually takes place in the fourth month. Prices collected according to the old specifications are then replaced in the database by prices collected according to the new specification. For the succeeding months, computation of index is based on the prices collected according to the new specification.

The greater the number of possible substitutes to choose from, the more difficult the problem of selecting the most appropriate substitute will be.

The following are the criteria in selecting the most appropriate substitute commodity specifications:

1. *Representativeness* – The substitute item to be chosen must be of the same quality and of the same price level as the lost item.

2. *Significance* – The substitute item must be popular with the buying public.

3. *Consistency* – There must be a steady supply of the substitute item in the market.

4. *Availability of price quotation* – Prices of the item selected as a substitute can be taken regularly.

One item may be more representative than another because of its similarity in description of price level to the lost item, but it may hardly compare with the latter in points of consistency of supply and availability of price quotations in the market. The choice, therefore, is which among the possible substitutes satisfies most of the above criteria.

If no appropriate specifications of an item (refers to brand, material and style of the same or nearly the same quality as that of the disappeared item, unit of measure, packaging, etc.) are available in the regular outlet or in any other outlets within the locality to substitute for the lost item, the following imputation procedure are being followed.

Example:
The item, cheese, Ques-O, 200 grams, disappeared from the market (regular outlets and in any other outlets in the locality) for more than 3 months and there is no possibility that it will reappear. Moreover, there is no available appropriate specification of substitute commodity.

Assuming that the last price of Ques-O is P31.55 and the available substitute, Kraft Cheddar cheese, 200, grams has a current price of P53.00 In terms of quality, the two types of cheese are not comparable so that prices vary significantly.

To impute the current price Ques-O, there is a need to collect the previous price of Kraft Cheddar cheese. The growth rate of the price of Kraft Cheddar cheese is computed using the current and previous months' prices. The price of Ques-O is then imputed as shown below:

	May 2007	June 2007
Ques-O	P31.55	?
Kraft Cheddar cheese	P51.00	P53.00

The Growth rate of the price of P51.00 and P53.00:

$$\text{Kraft Cheddar cheese} = \frac{P53.00 - P51.00}{P51.00} \times 100 = 3.92\%$$

Assuming that the price of all brands of cheeses increased by 3.92%; the price of Ques-O for June is

$$
\begin{aligned}
&= \quad P31.55 + 3.92\%(P31.55) \\
&= \quad P31.55 + P1.24 \\
&= \quad P32.77
\end{aligned}
$$

The same procedure is followed for imputing succeeding months' prices.

The imputed price is posted above the original price within the same cell in the consolidated survey forms.

However, if no substitute item can be found, e.g., a telephone service no longer available in the municipality, the price is maintained for three months. Beginning with the fourth month, this item is marked "not available" in the survey form.

b) If the brand is still present but the model has changed. The brand name is still carried and the price of the new model is accepted as comparable to the old one. Hence, in effect, the item specification has changed.

Proper care and judgment must be taken when substituting items in the market basket. Injudicious substitution may cause distortion in the picture of the situation. An abrupt change in price due to substitution (example, substituting Adidas for Spartan) gives a distorted picture of the price movement and thus may have serious implications on policy making.

c) Abandoning of Outlets
   Sample outlets are abandoned due to the following reasons:
   1. Complete abandonment for the outlet that has closed shop. It will be substituted by the nearest outlet or other outlet chosen using the criteria in outlet selection.

   2. Outlet will not be completely abandoned but partly (i.e., for specific items only) if one or more sample items disappeared for more than three months or permanently.

VIII. DATA DISSEMINATION

The periodicity of dissemination is monthly whereas the usual date of release is 5 days after the reference month.

The CPI data are released simultaneously to all interested parties by issuing the report "Consumer Price Index for the "MM, YY" and the accompanying press release at 9:00 a.m. One hour later, the press release on the monthly CPI is posted at the NSO website (www.census.gov.ph) containing textual analysis and tables on the CPI in the national and regional levels by commodity group mostly covering data for the latest and previous month.

Copies are faxed simultaneously to wire agencies, government agencies, newspaper offices, and news rooms of radio and television stations. Copies may also be obtained by request from the Office of the Administrator, NSO located at Ramon Magsaysay Blvd. Sta. Mesa, Manila. (Phone: 7160807. Fax: 7160734) and from the Economic Indices and Indicators Division (Telefax: 715-33-47/716-39-35).

CPI are disseminated at the following commodity group levels
- Major division
- Sub-groups
- 3 and 4-digit commodity groups

Average monthly retail prices of commodities and services included in the market basket are also available upon request.

CPI data series are available from 1957 onwards. A CD of the CPI (2000=100) from 1957 onwards by commodity group on a national, regional, provincial and selected city level is also available. Included also in the CD are tables on inflation rates and purchasing power of peso (PPP).

Notices of major changes in methodology are made through press releases prior to, or together with, the release of the data. These are also being posted at the NSO's website.

VIII. ISSUES/PROBLEMS

Below are some of the issues and problems in generating the CPI.

1. No fixed interval (number of years) in the rebasing of the CPI (1966,1972,1978, 1988, 1994, 2000) - depends on the availability of FIES data
2. Collection of retail price data from outlets selling items both at retail and wholesale prices - price collector should emphasize that data collected for the CPI are retail prices
3. Disappearance of item/s from the market (temporary/ permanent)

a. The overlap or linking method is used in pricing representative items that disappear due to changes in specifications
  – done by a parallel price survey for this representative item (according to the old and the new specification)
  – this usually takes place in two or three months time

b. prices according to old specification are then replaced in the database by prices collected according to new specification

c. for succeeding months, computation of index is based on the prices collected according to new specification

4. Coverage
  a. Rural/urban disaggregation - The CPI for the Philippines refers to the All Income CPI and has no disaggregation whether it is for rural or urban households
  b. Bottom 30% CPI (methodology was already approved by NSCB Board)

5. Operational problems
  a. Allocation of a big budget for price surveys in municipalities located far from the provincial capital and the NSO district office; also for island municipalities which are deemed to be important sample municipalities
  b. Synchronization in the submission of reports by the Bureau of Agricultural Statistics at the field offices.

Glossary of Terms

Below are some of the definition of terms and concepts used when dealing with the Consumer Price Index (CPI):

1. Index number - a device used to compare relative movement in the magnitude of a variable or group of distinct but related variables between two or more points in time. An index number also shows the relative differences in the magnitude of a variable obtained at the same period of time in different areas.
   The index number is expressed in percentage form and its units of measure is *percentage point*. The base of comparison is taken as 100, facilitating measure of change or difference relative to the base.

2. **CPI** - is an indicator of the change in the average retail prices of a fixed basket of goods and services commonly purchased by households relative to a base year.

3. **Retail Price** – the price at which a commodity is sold for spot in small quantities for consumption.

4. Base Period/Base Year - 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.

5. Market basket - is a term used to refer to a sample of goods and services that are commonly purchased and bought by an average Filipino household.

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

7. Inflation rate - is defined as the annual rate of change or the year-on-year change in the CPI. That is,

$$\text{Inflation Rate} = \frac{CPI_2 - CPI_1}{CPI_1} * 100$$

where:

CPI_2 – is the CPI in the second period
CPI_1 – is the CPI in the previous period

8. Purchasing Power of Peso (PPP) - is a measure of the real value of the peso in a given period relative to a chosen reference period. It is computed by getting the reciprocal of the CPI and multiplying the result by 100. That is,

$$PPP = \frac{1}{CPI} * 100$$