Data collection methods

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Price collection methods

Two basic price collection methods

- Local price collection: prices are obtained from outlets around the country.

- Central price collection: Prices are collected at the central office with little or no field work involved.

  - Combined with locally collected prices.

  - Prices used on their own to compute centrally constructed prices.
Principles of price collections

A CPI is normally designed to measure the change in the actual transaction prices of goods and services bought by consumers.

Observed prices or ticketed prices are assumed to be the transaction prices for the purpose of compiling the index.
**Principles of price collections**

**Catalogue and list prices**

- Cost effective method for obtaining prices.
- Reliability should be monitored regularly.
Principles of price collections

Collection by telephone

- Some prices namely for certain services can be collected by contacting the business or supplier directly by phone.
- The product must be a standard good or service.
- Regular visits to the supplier are still required.
Principles of price collections

The principle of the fixed-basket

- Underlying principle: The necessity to compare prices on a like-for-like basis from one period to the next.

- Two consequences:
  - Continuity in a product’s availability.
  - The need to record additional information.
    - Ensures the price collection of the same variety in case of a change in the collection staff.
    - Ensures proper quality adjustment in case of replacement.
Item specification

Considerations

- Tight specifications or broad specifications?
- Heterogeneous items require detailed specifications.
- Tight specifications allow for the calculation of “meaningful” average prices.
- Specifications should be reviewed on a regular basis.
The prices to be collected

With few exceptions, transaction prices should be collected.

- Ticketed prices in the shop for goods
- Tariffs or hourly/daily rate for some services
The prices to be collected

*Special offers*: Treated as regular sales, but price collector should ensure that the products are the same as in previous non-sale periods.

*Regular sales*: should be identified by the price collector. Prices for some items such as close to “sell-by” date should not be collected.
The prices to be collected

*Bonus offers, extras and free gifts*: Prices should be adjusted to reflect the additional free quantities.

- Except if extra units are unwanted or will not be consumed.
- Except in cases of 2 for 1 sale promotions. (Data entrance program must be include the size section of the items)
The prices to be collected

*Discounts restricted to special groups*: In general these prices should not be included in the CPI. Exception being when the discounted price are significant in coverage such as student bus fares and retired population discounts.

*Regular rebates or refunds*: Returnable deposits on bottles or other containers should be deducted from the price. Cash back offers on durables should be ignored.
The prices to be collected

*Stamps*: Such stamps which are redeemable on future purchases should be ignored unless a discount on current purchase is available as an alternative.

*Finance incentives*: Incentives such a zero-interest loans should either be ignored or treated consistently with the rules on changes in specification.
The prices to be collected

*Trade-in prices:* The price reduction should be ignored and record the selling price and not the remaining balance price after trade-in.
The prices to be collected

Sales taxes

- The CPI uses in its calculation the final price paid by consumers. In countries where the practice is to add the sales taxes at the check-out, then the collector needs to record this with the corresponding tax rate.

- Typically, the processing system will calculate the final price and not the collector.
The prices to be collected

Unavoidable costs which are not part of the advertised cost

- Some products will require that the consumer pay an additional cost over the ticketed price in order to be able to access the good.
- Example: the extra transportation charges of having a large appliance delivered.
- These extra charges should be added to the ticketed price when calculating the CPI.
The prices to be collected

Bargaining
The final price and quantity are not known until the purchase has been made.

- Ask the price from the seller
- Ask the price from a recent shopper
- Emulating an ordinary customer

In Turkish CPI, prices derived include all of the taxes, and the prices are cash prices without bargaining.
The prices to be collected

Quantities

- Foodstuffs are sometimes sold in local units of measure
  - Bunch
  - Bundle
  - Heap
  - Pile
  - Kg/lt

- The collector must purchase the product and weigh it into a standard measure using a scale.
The prices to be collected

Frequency and timing of collection

- Frequency of price collection is governed by several factors:
  - Volatility of prices
  - Types of markets
  - Method of calculating the CPI
The prices to be collected

- To satisfy the broadest range of users, the CPI is usually calculated at least once a month.

- Prices should be collected as often as possible to ensure accuracy.

- Some can be calculated as little as annually (e.g. tariffs).

- For highly volatile prices, the frequency of the price collection can extend beyond the periodicity of the index calculation.
The prices to be collected

Point-in-time or period pricing?

✔ Should the collected prices cover the whole reference period (e.g. a month) or a sub-period (e.g. a given week in the month).

✔ This will depend on:
  - Uses of the index
  - Resource availability
  - Pattern of price movement
The prices to be collected

Point-in-time: issues

- Better analysis of inflationary trends.
- Determining the collection day can be difficult.
- Logistical resource issues
The prices to be collected

Period price collection: issues

- Consistent with many economic statistics.
- Spreading the price collection over a greater number of days and over more outlets can provide a better representative price.
- Improved balancing of workloads.
The prices to be collected

- Price collection period must be limited to its associated reference month.

- Point-of-time and period collection requires that there be sufficient lead time for data processing and editing before release.

- Price collection dates should not be released in order to avoid having retailers change their prices to manipulate the index.
The prices to be collected

The collection of a particular set of prices at a particular outlet should occur at the same time of day, same day of the week, and the same week of the month in each collecting period.
Practical collection procedures

Planning and organisation

 The collection schedule
  ➢ It should include sufficient time for
    □ a collector to travel around all required localities within a reasonable number of working hours in a day
    □ allow for the movement of information and forms between the collection centres and head office.
Practical collection procedures

Dealing with queries

- Price collection queries need to be dealt with in a timely and efficient manner both because of the tight schedules associated with the compilation of a CPI and because of the difficulty in correcting errors when pricing retrospectively.
Practical collection procedures

Collecting prices in the field

- Price collectors
  - There are two practical means of recording price information obtained from personal visits:
    - paper form
    - hand-held computer
Practical collection procedures

- Optional to include previous collected price.

- Weight and quantity information should be included.

- Items should appear in such a way that the collector is quickly able to identify and read all necessary information about each item.

- Audit trails are important
Practical collection procedures

Completion of the forms (paper or electronic) should comply with the following guidelines:

- All prices should be entered into the collection sheet in full even if there is no price change.
- If a price is not available a reason must always be supplied.
- All information should be entered on the collection sheet as soon as it is obtained and not entered later from memory.
Practical collection procedures

- Collected data should be checked as soon as possible.
- Using codes to indicate various situations encountered while pricing will make recording of the information more efficient.

- **R** = Replacement: A replacement item that is comparable to the old item in all major aspects.

- **M** = Missing: The item is no longer available and is unlikely to return. There is no suitable replacement item.

- **C** = Carry Forward
Practical collection procedures

Field supervisors

- Supervisors should regularly check that price collectors are adhering to the price collection schedule and are undertaking the required checks at the appropriate time.

- Once data have been entered into the computer system and have been checked for transcription errors, field supervisors should check for consistency and credibility in price movements recorded by all the collectors under their control.
Training (compulsory)

Collectors need to be properly trained, require adequate instructions and easy access to guidance, particularly so given the facts that:

- Price collection is a non-trivial matter
- Snap judgements often need to be made.
- Collectors often work remotely on their own.
- Instant communication is not always possible.
- Collectors work in a dynamic environment
- It is difficult to rectify errors after the event.
Training (compulsory)

The training of price collectors should enable them to successfully perform all essential activities and deal with all potential situations including not just recording the price of an item but also:

- Persuading new outlets to become price providers.
- Understand and recognise occasions when prices provided are unacceptable.
- Recording relevant information to describe quality change in a product.
- Recognising unusual price movements when checking their collected prices.
Documentation

Documentation: Accessible, relevant and up-to-date work instructions are essential both for price collectors and their supervisors.
Centrally collected prices


A tariff is a list of pre-established prices and conditions for the purchase of one and the same good or service, or of similar goods and services that has been centrally fixed by the supplier, by the government, or by agreement to exert influence on the consumption patterns by means of using appropriately differentiated prices and conditions according to characteristics of consumers or the level, structure or timing of the consumption. Tariffs are not negotiable for households.
Centrally collected prices

Examples of centrally calculated indices are likely to include such items as telephone charges, utilities (water, gas and electricity), foreign holidays and banking services. These central spreadsheets are set up to model consumer expenditure on specific items and should be updated as part of the annual review processes.
Centrally collected prices

Moreover, if the definition of an elementary aggregate is more complex and hard to find in the regions, the price of this good or service is followed by centrally (teenager room furniture, high-tech products etc...).
Centrally collected prices

Prices for 49% of all products are collected centrally (i.e. newspapers and periodicals, post and telecommunication services, package holidays, accommodation services, electricity and fuel prices, tobacco goods, prices for some medicines and vehicles, bank services, etc.).
Thank you....