

# **Analysis of CPI-HICP Indices and Prices**

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TURKSTAT

# Data Analysis

In CPI calculations (also HICP), there are 3 phases of data analysis:

1. Control edits in tablet Pc,
2. Control in regional offices,
3. Central office control after all data transfer

# 1. Control edits in tablet Pc

While data compiling in outlets edit programs loaded in tablet pc does not permit illogical data entry, at least without an explanation. Some of the edits are:

- Digit error is not permitted,
- "0" price is not allowed, if the item does not exist (fishes or fruits-vegetables) "item is not available" must be selected.
- In case of a price change, explanation box must be filled with the reason of the price change

## 2. Control in regional offices

Before all prices and other data such as quantities sent to central office, data compiled by regional offices are controlled by supervisors in these offices. In this phase;

- All items are controlled according to previous period by means of price, quantity, brand, discount and etc.
- Item and outlet substitutions are controlled in terms of convenience,
- Items from same outlet (e.g. Carrefour) are controlled to have similar prices and properties,

## 2. Supervisor control in regional offices

- Seasonal items are especially examined in transition periods,
- Discounts in markets are examined in terms of duration, customer cards and etc.
- Items having increase or decrease above the group average change are controlled in detail,
- Finally after all these analysis, central office is informed to launch 3. phase of control.

## The auxiliary web reports

There are 17 reports in web, which have different purposes and coverage used in data analysis procedure by both regional office and the central office staff.

- Report 1 to 3: These reports constitute the main part of the data analysis and list the information about price, brand, quantity, discount etc. of the items compiled once, twice and four times a month.
- Report 4-5: Gives information about the consistencies of the number of item prices collected in current and previous month.

## The auxiliary web reports

- Report 6-7: Supply a list of item and outlet substitutions, respectively. They provide detailed information about substituted and new item. These reports are crucial for the implementations of quality adjustment methods.
- Report 8: Calculates basic statistical indicator such as minimum price, maximum price, standard deviation, confidence interval limits. This report is also helpful in detecting outliers of the group.

## The auxiliary web reports

- Report 9 and 13: report 9 lists the outlets which has a change in title and adress information. On the other hand report 13 gives informations about all outlets, By this reports it becomes easy to follow up the concerned outlets.
- Report 10: Gives the number of recorded prices in related period. By this way, the data lost (if any) in transfer or in any other processes is detected



## The auxiliary web reports

- Report 11: The assigned personnel in item in outlet base can be checked by this report. Total outlet and item number must be equal to the assigned outlet and item number.
- Report 12: This report lists the substitutions made but that are not confirmed by the supervisor. All substitutions must be confirmed or denied at the end of the month and this report must have "0" records.

## The auxiliary web reports

- Report 14: Provides information to compare the recorded data number of previous and current period in district and variety base.
- Report 15: By using item number it becomes easy to examine the previous periods of the item with reference period. It is useful especially for the substituted items.
- Report 16-17: These reports are set for following the “Item is not available” case for fishes, fresh fruits and vegetables in first term and at the end of the month, respectively.

### 3. Central office control after all data transfer

- ✓ The analysis performed by regional offices repeated also by central office staff for whole Turkey data.
- ✓ The web reports are examined also by central office
- ✓ If there is a problem about the data, regional office staff is warned to check the item again.

**THANK YOU....**