Consumer Tendency Survey and Consumer Confidence Index In Accordance With The Joint Harmonised EU Programme of Business and Consumer Surveys

Consumer tendency surveys measure present situation assessments and future period expectations of consumers on personal financial standing and general economic course and determining consumer expenditure tendencies in near future. Consumer confidence index is calculated according to this survey results.

Consumer confidence index is calculated according to the Consumer Tendency Survey carried out in cooperation with the Turkish Statistical Institute and Central Bank of Turkey through the modular application to the Household Labour Force Survey since 2003 and published monthly.

Since the Consumer Tendency Survey applied as the modular form of Household Labour Force Survey differs from the Joint Harmonized European Union Programme of Business and Consumer Surveys, an independent survey is needed to be applied.

The application fully harmonized with European Union programme covered the following changes:

    i.   Survey unit,
    ii. Questionnaire,
    iii. Periods referred in questions,
    iv. Questions used in the calculation of the index,
    v. The publication date of the index

The independent application has started to be implemented simultaneously with the modular application to the Household Labour Force Survey since January 2012 and the previous application was terminated in January 2013.

Changes in The Scope of Independent Survey Application

The European Union harmonized Consumer Tendency Survey which measures present situation assessments and future period expectations of consumers on personal financial standing and general economic course and determining consumer expenditure tendencies in near future is composed of 18 questions. The consumer confidence index is designed in line with European Union standards based on selected questions from the survey.

In the previous application, the survey is applied to the 15 age and above and economically active all persons in the household. Since 2012, it is applied to the person at 16 age and above as a representative of the household, randomly selected by the data entry pogramme. The condition of being economically active is not required.

Periods referred in the questions used in the calculation also show differences. While

expectations are examined over the next 12 months in a harmonized survey with the European Union application, assessments and evaluations were examined over the next 3 months, 6 months and for the current time in the previous application.

While the consumer confidence index was calculated by using 5 sub-indices in the former application, it is started to be calculated by using 4 sub-indices since 2012.

In 2004-2012 application, the consumer confidence index is calculated by using following sub-indices:

1. Purchasing power (present compared to the past 6 months)
2. Purchasing power expectation (next 6 months)
3. General economic situation expectation (next 3 months)
4. Job opportunities expectation (next 6 months)
5. Buying time condition of durable goods (present)

In the application since 2012, the index is calculated by using the following sub-indices:

1. Financial situation expectation of household (next 12 months)
2. General economic situation expectation (next 12 months)
3. Number of people unemployed expectation (next 12 months)
4. The probability of saving (next 12 months)

When the former index values are compared with the harmonized survey with the European Union application one's values based on the sub- indices covered, a difference at the level of 15 % in average is pointed out. According to the former application, while in December 2012 consumer confidence index is 89, in a harmonized survey with the European Union application this value became 73.6.

The level shift can be arising from the following items:

- Independent survey is being applied to the persons who are not economically active
- The ratio of persons stated their expectations for the question namely "in the next 12 months probability of saving" which was not covered in the former index but included in the harmonized survey with the European Union, is relatively low.
- The question in the sub index namely "convenience of the current period in purchasing durable goods" which has relatively high index value is not covered in the context of the new index.
- "The probability of saving index" included as a sub index of consumer confidence index in the new application was 22.9 in December 2012. This index is not included in the previous index.

The calculation method and assessment of index in the harmonized application with the European Union have not been changed. Question based indices are compiled in accordance with the balance method of European Union. The balance is calculated as the difference between the percentages of positive and negative responses and 100 is added to this difference, thus forming a separate diffusion index for each question. The consumer confidence index is calculated by taking arithmetic means of diffusion indices of the

selected questions. The index is evaluated within the range of 0-200. It indicates an optimistic outlook when the index is above 100, but it indicates a pessimistic outlook when it is below 100.

Sampling method

Stratified cluster sampling technique with three stages is used in the harmonized application with the European Union. The first stage consists of clusters containing addresses and the second stage is composed of households systematically selected from each clusters. In the last stage, an individual is selected randomly representing the household at the age of 16 and above. Stratified cluster sampling technique with two stages is used in previous application. The survey was applied to the 15 age and above and economically active all members of the household in the sample.

Sampling size

The survey is constructed as monthly to give the total estimation for Turkey. In 2012 the survey has been applied to 3 588 individuals. The survey is implemented 4 884 household on a monthly since April 2014. The sample size of the previous survey which was applied as a module to the Household Labour Force Survey was approximately 8 000 household members.

Publication date

Until 2013, consumer confidence index over the previous month were published on the first working day after 15th day of the following month with a news release. Survey results were released in the last week of the reference month between January 2013-April 2015 and the results have been released in the third week of the reference month since May 2015.

Backcasting of the Index for the period 2004-2011

Consumer confidence index in accordance with the European Union programme of Business and Consumer Surveys is calculated by using the Consumer Tendency Survey results for the year 2012 and January 2013. However, level shift was observed when the old and the new series were compared. Since the reason of the level shift is the changes in the questions used in the calculation of the index, a micro approach was evaluated as ineffective. A model based macro approach is adopted for back casting which is referred both in related European Union and IMF manuals. Reg-ARIMA model was chosen as the back casting approach. In addition to this approach, breakings in the trend and if there exists seasonal breakings of series related to changes in definitions and classifications of the statistics were corrected. Thus, back-casted series for the period 2004-2011 in accordance with the new definition was obtained.