CONSUMER SURVEY

Introduction

The consumer survey studies consumer opinions (assessments and expectations) and gives useful short-term economic indicators. They help government institutions to assess the effects of certain government policies, measures and economic conditions on the pessimism or optimism in the consumer assessments and expectations. The survey results may be useful to anybody who is interested in the economic activity – politicians, economists, entrepreneurs, bankers, etc.

The first harmonised survey of European Commission started in May 1972. The questionnaire used was a result of conducted experiments in France and Germany, as well as of studies of Professor Katona and economists of the Michigan University on the significance of subjective consumer assessments of the economic and social tendencies.

In order to assess the consumer behavior as well as possible the following themes are included in the questionnaire: households' opinions about the general economic situation in the country, inflation, unemployment. The consumers should also assess their impact on the consumption and saving, to express opinions about the financial situation of households, their saving potentials, their intentions for making major purchases for durable goods or intentions for buying a home or a car.

Nowadays such consumer surveys are carried out in the Member States of European Union, in USA, Japan, as well as in applicant EU countries.

Surveyed variables

The information gathered by the consumer survey has entirely qualitative nature, i.e. the interviewed persons point out their opinion on an ordinal scale, and quantitative information is not gathered. This is the feature that differentiates the consumer survey from the household budget survey.

Three groups of variables can be distinguished regarding the type of questions:

- Purely subjective variables. The different variants of replies are given in a verbal descriptive assessment of the situation, as for example in the question of the financial situation of households the variants are: "running into debt", "having to draw on our savings", "just managing to make ends meet", etc.
- Ordinal subjective variables. They give the opportunity to scale the consumer opinions from "much more" or "a lot better" to "much less" or "a lot worse".
- Probability subjective variables. Suppositions and future tendencies are expressed by these variables. They include reply variants as "very likely", "fairly likely", "not likely' and "not at all likely".

The questionnaire

The questionnaire includes 15 questions and 3 sub-questions with four, five or six variants of replies relating to the following variables:

- Financial situation of household - past and future tendency;
- General economic situation in the country - past and future tendency;
- Consumer prices - past and future tendency;
- Unemployment - future tendency;
- Major purchases (furniture, washing machines, TV, etc.) - present situation and future tendency;

- Household savings - present situation and future tendency;
- Financial situation of household - present situation with verbal description as "running into debt", "having to draw on our savings", "just managing to make ends meet" etc.);
- Buying a car – future tendency;
- Buying or building a home – future tendency;
- Purchases for home improvements (central heating, etc.)

All assessments of present situation or past tendency and all expectations refer to a 12-month-period of variable change.

In all questions a variant of reply "don't know" is offered, which the interviewed person can point out if he/she has no opinion.

Indicators

In order to use the variables of consumer survey as short-term economic indicators it is necessary to transform the qualitative replies in quantitative expression.

The indicator, which is perceived as the most appropriate, is called a balance (of opinions). This indicator is a function of the shares (percentages) of different variants of replies with exception of the variant "don't know". That function should satisfy some desired characteristics:

- Monotony. This characteristic of the function means that when the consumer's opinion changes and when it moves from lower to higher category (for example from "got a little better" to "got a lot better" or from "got a lot worse" to "got a little worse") the indicator should increase its value. It means also that the positive change of the opinion by more than one category increases the indicator value by a greater extent. And vice versa, when the consumer's opinion deteriorates, i.e. it shifts in the direction of worsening, the indicator should decrease. Similarly when it drops by more than one point the value of the balance decreases at a greater extent.
- Equilibrium point. The existence of a variant of reply to serve as a starting point for direction change. The moving of this category point to an upper one increases the indicator and vice versa - shifting of the reply in a downwards direction decreases the balance.
- Symmetry from both sides of the equilibrium point.
- Rule of weighting or scaling the opinions showing the same direction of change. More optimistic opinion has twice as much weight as the less optimistic opinion. The situation is the same for the more pessimistic opinion – it has twice as much weight as the less pessimistic variant of reply.

Balance calculation

The calculation of the balance is as follows:

Example: Question 1

How has the financial situation of your household changed over the last 12 months? It has…

++	1	– got a lot better	P_1
+	2	– got a little better	P_2
=	3	– stayed the same	P_3
-	4	– got a little worse	P_4
--	5	– got a lot worse	P_5
NSP	6	– don't know	P_6

Where

Pi is the relative share of consumers who choose the variant of reply "i" and "i" has values 1, 2, 3, 4, 5, 6 and

$$\sum_{i=1}^{6} P_i = 100$$

The balance of opinions of this question is according the following formula:

$$B = 1*P_1 + 0.5*P_2 + 0*P_3 - 0.5P_4 - 1*P_5$$

As mentioned before the variant of reply "don't know" does not take part in the balance calculation.

Different balances from consumer survey are combined in a composite indicator, which aims to measure "the level of consumer confidence" – the so-called Consumer Confidence Indicator. The Consumer Confidence Indicator was elaborated for the first time in USA and was later accepted by Europeans. The American Consumer Confidence Indicator is a component of the leading indicator of American economy. It is the only indicator based on a survey, which does not gather quantitative information – the Consumer Survey.

The European Commission also includes the European Consumer confidence indicator in the set of components of the Sentiment Indicator of the Commission. This so-called Sentiment indicator is also constructed as a composite leading indicator, but it is based on the Commission's Business and Consumer Surveys.

- Consumer Confidence Indicator
- Industrial Confidence Indicator
- Construction Confidence Indicator
- Retail Trade Confidence Indicator
- Services Confidence Indicator.

According The Joint Harmonised EU Programme of Business and Consumer **Surveys the consumer confidence indicator** is calculated as an arithmetic mean of balances of following variables:

- Financial situation of households - past tendency;
- Financial situation of households - future tendency;
- General economic situation in the country - future tendency;
- Intentions of making major purchases of durable goods - future tendency.

The relation between the survey variables and the quantitative time series

Data collected with the consumer opinion survey refer to different economic areas. In some cases the relation between these qualitative in their nature indicators and the actual qualitative data is very close. The main feature of the consumer survey indicators concerns the change in the phenomenon but not its absolute measure. In spite of this most of the indicators have forecasting potential.

- The two questions about the financial situation of households with regard to retrospective assessments and forecasts of consumers can be compared with the quantitative variable of income – compensations of employed or disposable income.
- The general economic situation in the country – future and past tendency, can be related to the indicator "GDP growth".

- The changes in consumer prices according to consumers' opinions could show tendencies in consumer price index, which is a quantitative indicator.

- Consumers' expectations about unemployment correspond to the subject of the quantitative indicator – percentage of unemployment.

- The balance indicators about major purchases are alternative indicators for individual consumption of durable goods.

- The indicators about the household's saving conditions and saving outlooks can be related to the quantitative indicators of saving of households.

- The indicator about expected car purchases from the point of view of the consumers can be compared with the actual car purchases by the population.

- Purchasing or building a home can be related to the population's investment in homes.

- The home improvements are a part of individual consumption.

- The consumer confidence indicator gives the opportunity to assess the changes in individual consumption.

Advantages and Role

One advantage of consumer survey indicators is their frequency. Quick, widespread and comparable information among the EU Member States, without revisions, are characteristics, which are not to be neglected. Of course it should be noted that these indicators couldn't replace the quantitative statistics.

The role of the consumer survey as well as of the other business tendencies surveys, is to give initial preliminary indication of tendencies in certain economic areas. The inquiries cover themes of quantitative statistics, but also they give information about expectations, which is the only available information of that kind, which is what makes it of significant importance to economists, politicians, entrepreneurs, etc.

In order to measure the relation between the quantitative data and the data of business and consumer surveys it is necessary for the time series to have sufficient length.

Consumer survey in the practice of NSI

The pilot consumer survey was conducted in June 1995. The initial intentions were to be quarterly – in January, April, July and October. Because of financial limitations the survey was conducted only twice in 1996 – in April and October, and once in 1997 – January, after that it was stopped for 3 years. The NSI Statistical Programme since 2001 includes the consumer survey on a quarterly basis.

Main characteristics of consumer survey

- The survey population of interest – the permanent population of Bulgaria aged 18 years and more;

- Sample of persons;

- Method of interview – face to face;

- Voluntary principle of participation in the survey;

- Harmonised questionnaire (15 questions and 3 sub-questions of EU)

- Rotated sample.

The results of each question are presented for all variants of replies including also the balance and are grouped according to the following characteristics: urban/rural inhabitants, income groups of households, occupation, age groups, gender and total.

Sample

The consumer survey is carried out 4 times a year on a rotational principle on a two-stage cluster sample, comprising of 4 independent subsamples, each of which is representative on a national level.

For drawing the sample is used the territorial distribution of the population by control regions and enumeration districts. They are used during the last population census as of February 2011. The survey object are all persons aged 18 years and older. The enumeration districts are chosen as clusters on the first stage and on the second stage the persons are determined as survey units.

The sample is stratified and as stratified characteristics are used the administrative regions in the country (28) and the residence of persons (urban, rural). Within each region (separately for urban and rural) the municipalities are arranged by size and inside them the settlements are arranged according to their population.

The first-stage clusters are chosen with a probability proportional to their size, and on the second stage by systematic sampling is being chosen an equal number of units - 8 persons.

Conclusions

The importance of such kind of information for Bulgaria, which delivers the consumer survey delivers, increases with the length of time series. The balances of indicators and the consumer confidence indicator could forecast some tendencies in the development of the economy, especially about the expected consumer behaviour. The usefulness of this survey is very promising.

The international practice in the field of consumer surveys has proved their significance and benefits. The widespread distribution of the harmonised survey all over the world is another proof in that respect.