METHODOLOGICAL APPROACHES TO THE CALCULATION OF INDICATORS

Based on an adaptation of the methodology used by The Joint Harmonised EU Programme of Business and Consumer Surveys (established by the European Commission Directorate-General for Economic and Financial Affairs), the National Bank of the Republic of Belarus calculates a number of similar monthly composite indicators on the basis of data obtained through the Enterprise Monitoring system.

Taking into consideration the specific features of the Business Climate questionnaire, so-called Economic Sentiment Indicators are calculated for each of the four economic sectors surveyed (industry, construction, trade, transport), which reflect the general mood and expectations in a particular sector of the economy.

Balances of responses are used to calculate all of the integrated indicators. Balances are the difference between the number of "more" responses (improved, increased, high, good) and "less" responses (worse, less, low, poor), expressed as a percentage of the total number of meaningful responses to a given question (excluding those left blank and those indicating "don't know").

ECONOMIC SENTIMENT INDICATOR IN INDUSTRY

The value of the indicator is the geometric mean of balances of responses to questions about:

- the change in the physical volume of orders (contracts) in the domestic market;
- the change in the physical volume of orders (contracts) in the external market;
- the change in the physical volume of unsold products;
- the expected change in production output.

ECONOMIC SENTIMENT INDICATOR IN CONSTRUCTION

The value of the indicator is the geometric mean of balances of responses to questions about:

- the change in the physical volume of construction contracts in the domestic market;
- the change in the physical volume of construction contracts in the external market;
- the expected change in the number of persons employed.

ECONOMIC SENTIMENT INDICATOR IN TRADE

The value of the indicator is the geometric mean of balances of responses to questions about:

- the change in the physical volume of goods unsold for more than three months;
- the change in the physical volume of the goods turnover;
- the expected change in sales volumes.

ECONOMIC SENTIMENT INDICATOR IN TRANSPORT

The value of the indicator is the geometric mean of balances of responses to questions about:

- the change in the physical volume of shipping agreements and contracts in the domestic market;
- the change in the physical volume of shipping agreements and contracts in the external market;
- the change in demand for an enterprise's services;
- the expected change in demand for an enterprise's services.

In order to allow for the tracking of overall economic activity in the country as a whole, a broader indicator is calculated - the **Composite Economic Sentiment Indicator (CESI)**, which aggregates changes in all four of the sectors surveyed.

COMPOSITE ECONOMIC SENTIMENT INDICATOR

The value of this indicator is the weighted geometric mean of economic sentiment indicators in industry, construction, trade, and transport. The weights used are the share of industry, construction, transport, and trade in Gross Domestic Product (the shares are standardized to 100 percent).

Seasonal smoothing, or seasonal adjustment, of data consists of the measurement of seasonal and calendar fluctuations and their exclusion from the original time series, which is necessary in order to gain an understanding of the dynamics of the process itself (changes in trend, production cycles, or irregular components).

The seasonal adjustment procedure for the survey data obtained through the Enterprise Monitoring system is performed using the X12-ARIMA method.

Seasonally adjusted dynamic series indicators are a standard instrument of statistical observation and are compiled along with the original (unadjusted) indicators. Adjustment for seasonality allows for the identification and measurement of patterns and trends in processes and the timely detection of changes occurring in them.