RESEARCH OF DYNAMICS OF MACROECONOMIC PROCESS

In economy the periods of the accelerated economic growth alternate with the periods of its decrease influenced by tactical factors of the market which changes should be diagnosed and predicted.

To research the dynamics of macroeconomic process it is offered to use the known concept of "leading indicators” which allows predicting occurrence of turning points of conjuncture change. Methodological aspects of the system creating forecasting of business cycles by means of leading indicators are investigated. In practice of research of business cycles following three kinds of indicators are used: the indicators, which dynamics steadily advances the development of macroeconomic processes; the indicators which repeat dynamics of macroeconomic processes with certain delay; the indicators, which dynamics is synchronous with dynamics of macroeconomic processes. From the experience of using the leading indicators in the USA, the countries of the Western and Central Europe it is possible to draw the following conclusions: subjects of cyclic processes in economics, forecasting of business cycles continue to be actual; systems on calculation, publication and distribution of leading indicators, for example, in the Bureau of the economic analysis (USA) and the Organizations of economic cooperation and development (OECD) are created; the organisation and introduction the system of leading indicators in Ukrainian practice of research of economic processes is expedient and possible.

The technique of creation of the integrated leading indicator consists of the following stages: a choice of macroindicators which reflect dynamics of national economy as a whole; the analysis and selection of the indicators, which dynamics steadily advances development of macroeconomic processes; updating of dynamic numbers of the selected indicators, consisting in seasonal smoothing and trend elimination; aggregation of modified dynamic numbers of the selected indicators into integrated leading indicator; analysis of a dynamic number of the integrated leading indicator for the purpose of predicting the approach of a phase of favorable or unfavorable conjuncture. For the analysis of a casual component in the dynamics of integrated leading indicator the following criteria are used: the level of diffusion of
integrated indicator components; the rate and the period of change of the integrated indicator.

The statistical data of developments of the national economy for the period from 2000 to 2007 are investigated. The Gross National Product macro indicator most adequately displays the dynamics of the national economy. However, Goskomstat does not publish statistics of Gross National Product for creation of its dynamic number for months. Researches have shown, that the macro indicator index “industrial release” adequately traces dynamics of Gross National Product and in such situation can be used as the basic cyclic indicator. Following indexes have been chosen from possible leading indicators: industrial output; retail goods turnover; consumer prices; the prices of the manufacturer of industrial products; the world prices for ferrous metal; export of goods; population incomes; the prices of shares of the leading companies; the interest rate; monetary unit M2; the basic interest rate of the National Bank; a number of the registered unemployed; the rest of trading balance.

There is a probability of no synchronism in the dynamics of points of crisis of a conjuncture on the drawing (model) of the integrated leading indicator and a conjuncture of real economic process. It can take place at structural changes or casual events which did not occur in the past, or accidents in statistical lines. Therefore the system of predicting of business cycles by means of leading indicators is expedient for using together with other systems of predicting.