

## FLUCTUATIONS AND CYCLES IN THE SERIES OF ECOLOGICAL AND ECONOMIC DYNAMICS

**Kubatko O.V.**

Candidate of Economic Sciences, Associate Professor,  
Senior Lecturer at Department of Economics  
and Business Administration,  
Sumy State University

The paper deals with the analysis of economic and ecological fluctuations, which are considered to be oscillations of the system parameters that can be created both by the economic system itself and by the external environment as well. It is stated that any fluctuations are resulted in changes of economic system development and promote its deviation from the parameters of homeostasis (average values or trend indicators).

The paper underlines that current practice of economic research deals mainly with fluctuations, which have a variety of rising and descending properties, and less attention is devoted to cycles.

The paper finds the national economy coherence properties within fluctuations in harmful emissions and gross domestic production per capita. Actually, it is found that up to 2010, the reduction of air emissions was associated with even greater amplitude downtrend of GDP per capita. However, starting the times of global financial crisis 2008–2009, there were observed structural changes of the Ukrainian economy and

domestic GDP in relative terms has become less dependent on “dirty” industries.

The papers describe a mechanism for identifying the leading, coincident and lagging business cycle indicators that are of great practical importance. It is indicated that fluctuations of lagging economic indicators do confirm the hypotheses that are based on leading indicators and coincident business cycle indicators, and help to develop the use of (counter) pro-cyclical measures.

In order to identify the upward or downward sloping dynamics, it is needed to analyse the crucial economic markers. Thus, among the earliest markers indicating the beginning of recession are: reduction in investment, which involves the creation of new enterprises; contraction in a number of signed contracts for commercial and industrial building; contraction in a number of orders for new machinery and equipment; reduction in issue of new debt and issue of new shares for financing business development.