

SYSTEM ADJUSTMENT OF DIFFERENT NATURE DATA FOR GLOBAL MODELING OF SUSTAINABLE DEVELOPMENT

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One of the major challenges to modern science because of the prompt development of the global economic crises and aggravation of global conflicts is to draw up scientifically justified “metric” express forecasts of the social development for near and far future. The role of any scientific forecasts and predictions should not be exaggerated since they are conventional and limited, especially in the cases where the process being analyzed passes to the so-called “blow-up mode”. However, the reliability of any forecast considerably increases if it “resonates” with other global or local tendencies, hypotheses and patterns. In our study, such additional conditions are modern hypotheses that the historical time accelerates and the duration of Kondratiev cycles (K-cycles) tend to reduce with the scientific and technological progress.

Proceeding from the above facts and considering the evolutionary development of the civilization as a holistic process determined by a harmonious interaction of its components, we will compare the patterns of Kondratieff cycles of the development of the global economy and C-waves of global systemic conflicts and will make an attempt to predict the course of periodic processes in the 21st century using a metric approach.

The results of the analysis allow to conclude that the 21st century will most probably manifest three K-cycles with the average duration of one full cycle about 30 years, which is much shorter than the average duration of one of the previous five Kondratiev cycles (≈ 50 years).

The revealed synchronization of the development of the global economy and the course of global systemic conflicts can be interpreted as indirect confirmation of the adequacy of the models of Kondratieff cycles and C-waves.