FRACTAL ANALYSIS OF FINANCIAL MARKET DEVELOPMENT INDICATORS

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Annotation. *In the article the possibilities of using fractal analysis for revealing tendencies of financial market development on the example of the discount rate are investigated. The importance of checking financial indicators for persistence and anti-persistence before the implementation of correlation-regression analysis is substantiated. The coefficient of current volatility is calculated and conclusions are drawn regarding the fractality of the change in the discount rate.*

Keywords: *financial market, fractal analysis, persistence, coefficient of current volatility.*

Financial globalization exacerbates the need for the search for new adequate methods, approaches and techniques of scientific research into economic relations, which are formed in the modern financial space in general, and financial markets in particular. An alternative method of researching the financial market is the fractal analysis and the identification of the persistence of financial and economic phenomena, which is an urgent problem. The purpose of the work is to study the development of the financial market using fractal analysis on an example of the discount rate.

The possibilities of using fractal analysis for revealing tendencies of financial market development on the example of the discount rate are researched in the article. The importance of checking financial indicators for persistence and anti-persistence before the implementation of correlation-regression analysis is substantiated. The coefficient of current volatility is calculated and conclusions are drawn regarding the fractality of the change in the discount rate.

Calculating the current volatility coefficient as one of the measurements of the fractality of a particular dynamic process, we found that the change in the discount rate has all the signs of fractality. The hypothesis of the fractality of financial markets emphasizes the influence of the time horizon on making managerial decisions on changing the discount rate.

The purpose of the hypothesis of the fractal market is to predict the behavior of the NBU and the rates of discount, which are consistent with the observation of economic agents. In further research it is worth analyzing the dynamic series of key indicators for the development of the financial and real sectors of the economy, which will reveal the presence or absence of persistence or anti-persistence and, based on this, select research methods that will minimize the statistical error.

Therefore, the analysis of the dynamics of the NBU discount rate with the use of technical analysis tools can greatly complement scientific research on the effectiveness of the use of this money supply adjustment tool and draw additional conclusions about the effectiveness of the central bank's stabilization policy.

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