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GEO-ECONOMIC REGRESSION MODEL FOR POST-SOVIET COUNTRIES

Article built regression models for most post-Soviet countries to compare several neighbouring countries that are geo-economically important for individual countries in the region. It is possible to compare how financial and monetary mechanisms are similar within the region or with outside countries. Available estimates suggest that the integration and reform in the regulation of financial markets should be adapted to the differences in the functioning of financial markets.

The relationship between the dynamics of the financial market of the CIS countries and other macroeconomic indicators should be determined on the example of the banking segment of financial market using regression-correlation analysis. As the dependent variable in models constructing the monetary aggregate M2 growth in local currency is chosen. More useful would be information on the M3 or M4, which include more range of financial instruments and stock market indicators, including the dynamics of market capitalization. However, recent indicators for post-Soviet countries are less available for the selected time period. Investigated period includes 1996-2015 years.

As independent variables are selected growth of foreign exchange reserves in dollars and the real GDP growth, which in most cases show a correlation. These two variables describe how dynamic of resource base of the banking sector is caused, respectively, by 1) external (exports, imports and foreign investments that affect the dynamics of foreign exchange reserves) and 2) internal factors (GDP growth).

The correlation between M2 growth and foreign exchange reserves amounted to 0.56, between M2 growth and GDP growth – 0.68. At the same time two independent variables together correlated weakly (0.26), which reduces the problem of multicollinearity. As a result, the model for Ukraine is:

GM2 = 24.40 + 0,135GFER + 1,35 GGDP

Where GM2 – growth in M2, %

GFER – growth of foreign exchange reserves, %

GGDP – real GDP growth, %.

The coefficient of determination of 0.62 is quite high and statistically significant for the F-criterion. t-statistics indicates statistical significance of both regression coefficients of the independent variables.