DYNAMICS OF ECONOMIC GROWTH IN GERMANY: SOURCES, FACTORS AND INTERESTS

Sergii V. Kuzminov, Alfred Nobel University, Dnipro (Ukraine). E-mail: kuzminov@ duan.edu.ua

Valintine Ie. Zhuravliov, Alfred Nobel University, Dnipro (Ukraine). E-mail: student. zhuravlev.valentin@gmail.com

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The article explores the economic model of Germany's development as an export-oriented country. Factors affecting German GDP development have been identified, as well as a link between exports and GDP.

The article analyzes the dynamics of German GDP. Based on the assumption of the endogenous nature of the 2009 crisis, the list of possible transfer mechanisms of the crisis is analyzed:
– international trade;
– international investments;
– international labor migration;
– international scientific and technical cooperation;
– international economic policy coordination.

The article justifies that among all possible mechanisms that influence the dynamics of German GDP, export and investment should be considered the most important.

The possibility of constructing a multiple regression model is considered in the article. Pairwise correlation coefficients between GDP, exports and investment were calculated. The coefficients were calculated taking into account the possible time lags for the calculation of interdependencies. On the basis of empirical data, it is found that time lags are likely to not exceed one year. Also, the results of the calculations indicate a significant threat of collinearity in the construction of multiple regression, so multiple regression had to be abandoned.

Export dependence on GDP was analyzed. The regression equation $y = 95.82733e^{0.000847x}$. From this model we can see that the equation has an exponential form. Elasticity coefficient constituted $E = 1,736$. Since the coefficient of elasticity is greater than 1, exports change by 1% results in GDP change by more than 1%. This is an argument in favor of exports as a leading factor in German GDP dynamics. Also it is significant, that the relationship between the indicators is very tough ($R^2 = 0,9509$). This indirectly indicates that other factors play a significantly smaller role than exports.

The article also tests a model built on the Keynesian assumption of the leading role of investment in the dynamics of national production. The paper hypothesized on investment as a factor of economic growth. This hypothesis was tested and rejected as having not been empirically confirmed.

To determine the leading factor for economic growth, the marginal values analysis was conducted. This type of analysis also confirmed the validity of the conclusion that exports play a decisive role in Germany's economic growth. It was also found that the correlation between changes in exports and changes in investment activity in Germany is quite low. This allows us to make a number of further assumptions about the details of the export-GDP pair interaction mechanism.

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