Comparative analysis of national technological coefficients.

Topic: Structural Comparisons
Author: Alexander Shirov
Co-Authors: Alsu SAYAPOVA, Iskander SYRTLANOV

Besides the fact that technological coefficients are the basis all types of Input-Output model, changing technological coefficients - are a concentrated expression of the structural changes in economy. In spite of it studies of changes in technological coefficients over time and space (i.e., technological coefficients of various national economic systems) are very rarely found in the scientific literature. The root cause of this fact is the presence of restrictions on the information base of comparable systems of coefficients of direct costs. These restrictions apply to both spatial and temporal aspects. In the global statistical system for today there are no standardized industry classifiers and methodical regulations on the compilation of input-output tables. It almost makes disparate input-output tables of different countries, being published by official statistical authorities. This problem does not apply to the European Union countries, because the unified input-output tables are developed for the countries of the Union.

To some extent the database WIOD eliminates the problem of comparability. However, there appears a problem of mismatch of technological coefficients given in national symmetric input-output tables of WIOD and the ones published by national statistical offices. Moreover, there appears a problem of mismatch of technological coefficients given in national symmetric I-O tables in WIOD and the ones published by national statistical offices. That is obviously looked through the case of Russia. In this paper we performed a comparative analysis of values of the technological coefficients obtained from different sources for Russia and other countries. Then, taking the technological coefficients obtained from the database WIOD as a basis, a spatio-temporal analysis of technological coefficients is performed. Conclusions about technological features in different countries became result of research.

Keywords: Input-Output, technological coefficients, comparative analysis