

Estimating the Technological Factorâ€™s Contribution in Economic Dynamics

Topic: 814X Structural Change and Dynamics

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The present paper is a continuation of research on the analysis of spatio-temporal characteristics of the technological coefficients, the results of which were presented at the previous Input-Output conference. This stage in research is characterized, firstly, by the broadening of the database of national economic systems included in the comparative analysis with Russian technological coefficients. Secondly, based on total requirements coefficients, the component determined by changes in technological coefficients in the economic dynamics is singled out as object of research, and the position of Russia on this indicator is estimated using cross-country comparisons. Thirdly, the evaluation of the technological component in the economic dynamics is performed based on global and national input-output tables, including the estimated contribution of technological changes in the world economy. Fourthly, in line with the expansion of the cross-country research base, there is also an extension of the list of industries, the cost structure in which is subjected to scrutiny. This research must result in forecast and analytical calculations with various scenario options of technological coefficients for Russia.

Unfortunately, despite the relevance of this line of research, Russia does not have a sufficiently complete own information database for the analysis of the dynamics of technological coefficients, not to mention the limited possibility of cross-country comparisons using such database. For this reason, in addition to the official data of the state statistical agencies of Russia, we have to go to international databases for these purposes, in particular to WIOD.

Key words: technological coefficients, total requirements coefficients, economic dynamics.

* The work was supported by Russian Foundation for Humanities (project 16-32-00063).