

The Estimation of Import Consumption Dynamics in Input-Output Models

Topic: Methodological aspects of input-output analysis

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The article is devoted to the issues of Input-Output modelling in two inter-related dimensions connected with estimation of import matrix. The first dimension aims to development of the approaches to estimation of import consumption in sectors of national economy. The second dimension focuses on estimation of volumes of transferred value of intermediate imports to value of national output for internal final consumption and exports.

Objective limitations in national statistics determine the complexity of research in the concerned dimensions. So the requirement in solving these problems is very applicable. It is important for estimation of national economic development prospects, for effective foreign trade policy-making. This appears to be the reason of actuality of the article, which takes under consideration the mentioned aspects.

In the first part of article the task of import real demand of main types of intermediate products forecasting was formulated as a problem and solved. Also the way to include these forecasts in Input-Output model, when we estimate shifts in the structure of direct costs matrix, was introduced. In the second part of article the problem of decomposing the value of final national output on national and foreign GVA and net taxes on products was solved. While working at this problem the classical IO model has undergone transformation.

The article contains a description of possible ways to overcome informational limitations, including the solutions found in the field of model constructions for research purposes. Also the quantitative estimates of the results of this method application for Russian economy are given. They include the description of the specification of real import demand functions for the most important types of intermediate products; the estimates of the economy response to shifts in intermediate imports demand, taking into account intersectoral relations and changes in the share of intermediate imports in total value of national output for final consumption, gross capital formation and exports over the last years.