# Estimating of stochasticity of technological coefficients in Russian Input-Output tables

Topic: Regional input-output modeling 3
Author: Alsu Sayapova
Co-Authors: Rustam Ishbulatov

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Topic: Estimating annual, regional, and multiregional input-output accounts
Author: Alsu Sayapova
Co-author: Rustam Ishbulatov

The technological coefficients' errors in Russian input-output tables, both at the national and regional levels, arise from numerous sources. At the national level such sources are: biases in data of one-time-only survey of production cost structure, selective character of the survey, biases in the estimation of the shadow economy, errors of the transition from SUT to SIOT, etc. At the regional level, apart from the above sources, statistical data required for the drawing up of the input-output tables are incomplete, particularly it concerns incomplete data on regional import-export operations. Besides, the survey-based regional tables simply have not been constructed for a long time in Russia. The few studies, that rely on the regional IOT, use the regionalization of national tables of Russia. The latter is an additional source of possible deviation of the regional technological coefficients from their true values. The expected reforms regarding regional authorities do not predispose towards the construction of regional input-output tables based on the survey of production cost structure for 2011. Therefore, nothing remains but to evaluate possible errors in the regionalized input-output tables, treating their parameters as stochastic variables. In this respect, we consider methodical approaches to the determination of the confidential intervals for the regional technological coefficients, to the assessment of the impact of such errors on the accuracy of calculations for endogenous variables in input-output model, to the assessment of the model's stability and identification of technological coefficients, in relation to which the model is particularly sensitive. The methodical approaches are being implemented on the example of the regional input-output table developed by the authors for the Republic of Bashkortostan.

Keywords: regional input-output tables, technical coefficients, stochastic variables.