

On the stability of input-output relationships

Topic: Input-Output Theory and Methodology (4)

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Input-output tables are widely used for impact and policy analysis, including the assessment of specific economic shocks, trade sanctions, natural disasters, etc. Since most national statistical offices compile input-output tables only every five years and publish them with a certain delay, the stability question, or the question of the temporal validity of the structural information used in applied analyses, remains relevant. The economic structural characteristics captured in a five-year-old snapshot can be misleading sometimes. The stability of input-output coefficients has been examined in the literature; some recent studies propose approaches that relax the fixed coefficients assumption. For Russia, official survey-based input-output tables are available only for 2011, 2016, and 2021, spanning a decade; the most recent tables for 2021 were published in 2025. We use the official data provided by the Federal State Statistics Service of Russia to examine the structural changes and the temporal stability of key parameters of the input-output system (including the dynamics of input coefficients and different types of multipliers) along with an estimation of potential forecasting errors. Statistical analysis, and econometric techniques are employed. Our findings on the heterogeneity in the stability of input-output relationships across sectors can provide useful guidance for applied analyses.