Decomposition Analysis of Sources of Economic Growth in Russia Based on Russian Input-Output Tables

Topic:
Author: Elena Alekseevna Staritsyna
Co-Authors: Anna Elsakova, Eduard Filaretovich Baranov, Evgeniya Korneva

This paper considers the structural decomposition approach which identifies the sources of dynamic changes in output and import. With the lack of official Russian Input-Output Tables for analysis we use the time series of symmetrical input-output tables for Russia based on NACE rev. 1 classification from WIOD project. Then we deflate these current price tables in prices of 2008 year. The results of the analysis enable us to determine the influence of changes in technology (intermediate demand) and final demand on the increase or decrease of the value of output and imports at the level of 34 industries and in the whole economy for the period from 2003 to 2010. For the final demand we also estimate the contribution to the changes in the final demands between two periods (1) the final-demand level; (2) the distribution of total expenditure across final-demand categories and (3) the product mix. Due to the lack of statistics, many a priori assumptions were used in the construction of Input-Output tables at current and constant prices; therefore, the estimates obtained from our calculations are illustrative. Nevertheless, the general policy conclusions from this analysis to a certain extent can be considered reliable. The period from 2003 to 2010 in the Russian economy was characterized by important measuring features of the dynamics of production. Some of these features include structural changes in the industry and the resource-saving reflecting the transformational nature of the Russian economy, as well as the increase in the share of imports of goods and services in the structure of the intermediate and final demand. The growth in investment demand for machinery and equipment is fully covered by imports. Among the factors that contribute to changes in final demands between 2003 and 2010 decisive role belongs to final-demand level.