Construction of subnational multiregional Input-Output tables: The case of Germany's federal states.

Topic: Regional input-output modeling IV

Author: Johannes Többen

The construction of Multiregional Input-Output (MRIO) databases on the subnational level is considerably hampered by its significant cost in terms of manual labour and scarcity of data on regional industry- and household structures as well as interregional trade. The construction, therefore, often relies heavily on nonsurvey methods with questionable reliability. In order to improve data quality superior data can be used facing problems of heterogeneous classifications and possibly conflicting information.

In the case of the MRIO construction for Germany's 16 federal states these issues are addressed as follows: The construction is based on a hybrid approach, which combines an initial estimate based on nonsurvey techniques with large amount of superior data. Regional industry cost- and household consumption structures are estimated from survey data. The estimation of interregional trade is based on transportations statistics in combination with regression analysis taking effects of distance and weight on value-to-ton ratios explicitly into account. The consolidation of the initial estimate and superior data is conducted using the Automated Integration System for Harmonized Accounts (AISHA), which allows the time saving and transparent integration of possibly conflicting data.