

A bi-regional Input-Output model for Portugal: Centro Region and Rest of the Country

Topic: Regional input-output modeling I

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Regional Input-Output models aim to quantify the impacts on industry's outputs, and other economic indicators, of different final demand vectors for goods and services produced in the same or in different regions. These models are well suited for regional economic analysis as they combine intra-industrial and interregional economic interdependencies. MULTI2C is a general flexible procedure, developed by a group of researchers from the University of Coimbra, Portugal, that allows for the construction of that kind of models for different geographic configurations.

This work describes the construction of a bi-regional input-output model for Portugal, based on the MULTI2C approach, considering two regions: the NUT II Centro of Portugal and the Rest of the Country. This model considers rectangular matrixes with 431 products and 125 industries. Furthermore, we distinguish between 5 types of households according to their main source of income, i.e., labor earnings, capital incomes, property housing incomes, pensions and other social transfers. This modeling framework may be closed with respect to the consumption of different types of household, but this paper only considers as endogenous the labor earnings type. Besides the presentation of the model structure and a brief account about the methodological choices made in its construction, this work focuses on estimating interregional trade.

Finally, this model is used to assess the impacts in the Centro of Portugal region, and in the Rest of Country, derived from a shift in the distribution of income in the Centro region, consisting in a reduction of the labor share, compensated by an increase in business investment, which however do not confine to the NUT II Centro of Portugal but may into some extent spillover to the Rest of the Country.