Economically Sustainable Demography: Reversing Decline in Portuguese Peripheral Regions

Topic: Using SAMs
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This paper proposes an integrated demographic and economic model to forecast population change up to 2030 in depressed Portuguese Peripheral Regions (PPR), corresponding to 14 NUTS III regions, where population is declining and ageing. The ultimate goal of our study is to uncover policy strategies to revert these areas demographic decline.
The projections for PPR population changes depend both on population´s natural increase and net migration. The key idea of this modeling framework is the hypothesis that net migration (for population under 65 years) depends on employment, assuring the integration of the demographic and economic components of the model. Accordingly, we use regional IO models, considering a SAM-type frame (with two kinds of households: over and below 65 years) to project – under scenarios analysis – employment's progress in PPR. For this, our first (and perhaps major) task involves building the SAMs for these small PPR, as such data are not available in Portuguese official statistics. Then, the population below 65 final consumption is considered as endogenous to the SAMs. Finally, (what if) scenarios on future economic activity up to 2030 are implemented. This will be done through an iterative process where the employment flows generated in the SAM model are made consistent with the migrations estimated within the demographic model component.