Welfare effects in a regional economy: The case of Buenos Aires using a CGE approach

Topic: CGE and econometric input-output modelling 4

Author: Leonardo Javier Mastronardi

In recent years, the computable general equilibrium (CGE) models for different regions has become an important area for research in economy. The aim of this paper is to make an interregional general equilibrium model for Argentina. This is the first approach for the country as it allows to quantify direct and indirect regional effects. To have advance results, it is better to take political or economic decisions. In particular, we focused our work on fiscal federalism and changes in fiscal policy.

The main point of the paper is to make a CGE Model, which shows the results for different simulations based on fiscal policy. We separate Argentina in two regions: Buenos Aires City and the rest of the country.- First, we need to make an interregional social accounting matrix (RSAM), which includes flows between households (two for each region), regional sectors, government and external sector. Unfortunately, Buenos Aires does not have an Input Output Tables or a regional account system, so we have to construct the model with non survey and calibration techniques and other estimations. Then, we take the RSAM data and make a computable interregional general equilibrium model using MPSGE plataform on GAMS program.

As it was mentioned, we want to understand regional differences in terms of welfare and levels of activity by changes on fiscal policy. The idea is to measure the winners and losers when the central government changes their national policy into the region (in this case in Buenos Aires and in the rest of the country), and when local government changes their tax policy. Therefore we use the interregional CGE model to capture these things. As follow, you will find how we analyze the effects for economics agents of changes in important taxes of the country like regional sales tax or other regional taxes (decided by local government) and national value added tax, national import tariffs or national factors taxes (decided by national government).