

Policy Spillover, TFPS Distribution and Price Distortion

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Abstract

In this work we propose a synthesis among CGE modeling and the analysis of surplus distribution. We present a regional computable for the autonomous Region of Sardinia, used for the main purpose to evaluate the impact of R&D subsidy and by this model we attempt to analyze and measure the distribution of productivity gains generated by the policy. We incorporate in the CGE the distribution rule of the Total Factor Productivity Surplus (TFPS), developed by Fontela (1989) in an input-output framework and we find that the cross border spillover may improve the long run rate of growth generating a large amount of TFP. Moreover a simple analysis of the surplus distribution allow to identify progressive sector and sector which substantially absorb productivity gains from the rest of the system. By concluding we propose, as a further step, the procedure in order to compute TFPS distribution in an ideal situation of perfect competition. We refer both to the Market Surplus measured by Garau (1993) using a Divisia approximation of Tornqvist index and to mark up calculation proposed first by Christopoulou and Vermeulen (2008).

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