

The Impact of Regional R&D Subsidy in a Computable General Equilibrium Model

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Abstract

This article presents a computable general equilibrium model for the region of Sardinia (Italy) with the purpose of investigating the macroeconomic impact of research and development (R&D) policies. The model incorporates induced technical change obtained through knowledge accumulation and external knowledge spillovers. It turns out that the cost of R&D policies may change according to wage setting in the region. Indeed, the likely size of the optimal subsidy that is required to reach a given target growth is lower when wages are bargained locally compared to the case where wages are bargained nationally. Furthermore, the capacity of such a policy to generate knowledge spillovers from international and interregional trade is quite modest. Indeed, the capacity of the regional system to internalize innovations embedded in imported goods is partially offset by an increase in internal efficiency that lowers the spillover intensity through a reduction in the share of imports.

Keywords

regional CGE models, R&D policies

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