

Mission-oriented policies and the “Entrepreneurial State” at work: An agent-based exploration

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Abstract

We study the impact of alternative innovation policies on the short- and long-run performance of the economy, as well as on public finances, extending the *Schumpeter meeting Keynes* agent-based model (Dosi et al., 2010). In particular, we consider market-based innovation policies such as R&D subsidies to firms, tax discount on investment, and direct policies akin to the “Entrepreneurial State” (Mazzucato, 2013), involving the creation of public research-oriented firms diffusing technologies along specific trajectories, and funding a Public Research Lab conducting basic research to achieve radical innovations that enlarge the technological opportunities of the economy. Simulation results show that all policies improve productivity and GDP growth, but the best outcomes are achieved by active discretionary State policies, which are also able to crowd-in private investment and have *positive hysteresis* effects on growth dynamics. For the same size of public resources allocated to market-based interventions, “Mission” innovation policies deliver significantly better aggregate performance if the government is patient enough and willing to bear the intrinsic risks related to innovative activities.

Keywords: Innovation policy, Mission-oriented R&, Entrepreneurial state, Agent-based modelling