State-Dependent Public R&D Investment Multiplier: Evidence from OECD Countries*

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Abstract

The paper aims to investigate whether the effects of government investment in R&D and more generic fiscal policies vary across different phases of the business cycle. Following the recent literature on fiscal policy, we use the Local Projection (LP) approach by focusing on a panel of 15 OECD countries for the period 1981-2017. Firstly, we examine how the literature addresses the definitions of expansion (boom) and recession (slack) periods and how these definitions imply considering various phases of the economic cycle. We present the results considering two different definitions of expansion (boom) and recession (slack). The analysis extends beyond GDP effects to explore the transmission channels of fiscal policy, analysing the effects on private consumption and investment to understand the mechanisms underlying the different values of fiscal multipliers during different phases of the business cycle. The results show that the definition of expansion and recession is relevant for the analysis, as they may entail considering different phases of the business cycle. The results are confirmed using the Smooth Transition LP (ST-LP) model and the dummy approach (D-LP).

Keywords: Fiscal multipliers; Public investment in R&D; non linearities; local projections;

OECD countries.

JEL Codes: C33; E62; O30; H50.

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