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ABSTRACT: In this paper we examine the impact of subsidies granted at national and regional levels on a set of R&D employment variables and, specifically, we seek to identify the existence of the behavioural additionality effects of these public subsidies on firms' R&D human resources. We begin by assessing the effects of public funds on R&D private expenditures and on the number of R&D employees, and then focus on their impact on the composition of human resources engaged in R&D as classified by occupation and level of education.

The data used correspond to the Spanish Technological Innovation Panel for the period 2006-2011. To control for selection bias and endogeneity, a combination of non-parametric matching techniques are implemented. After ruling out the existence of crowding out effects, our results show that R&D subsidies increase the number of R&D employees. However, no increase is found in the average level of qualification of R&D staff members in subsidized firms. All in all, the effects of public support are heterogeneous being dependent on the source of the subsidy and the firms' characteristics.

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Keywords: R&D subsidies, R&D employment, matching estimators, technology policy

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