CIFREM SEMINARS

Is there an impact of public subsidies to investments of firms on Total Factor Productivity growth?

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The paper tries to fill the gap in studies on the effects of direct public subsidies to firms on total factor productivity and on the determinants of its evolution. We explore the issue using a unique high quality database about an Italian province. Moreover, we propose an original two stage technique. First, we estimate TFP through a non parametric technique (data envelopment analysis) and we calculate the Malmquist productivity index and its decompositions. Secondly, we use a propensity score matching approach to compare TFP changes and the contribution to such changes of its different components between subsidized and non-subsidized firms. Results show that if we limit our analysis to the study of changes on TFP no effect can be detected. If we go in depth to a first level of decomposition looking separately at efficiency and technological changes of TFP, we still detect no effects. However, once we go in depth decomposing and analysing the changes in technological components of TFP (i.e. looking at magnitude effect and input substitution effect) we do observe significant impacts. In particular, subsidies firms seems to have smaller negative effects on magnitude of component and a more sticky behavior respect to input substitution. Policy considerations conclude the paper.

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