

The impact of innovative public procurement on technological entry and innovation persistence: evidence from CERN

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This paper contributes to the literature on the impact of large-scale research infrastructures on innovation. We exploit data on public procurement to study the impact of CERN - the European Organization for Nuclear Research - on technological entry and innovation persistence. Specifically, we assess the effect of CERN on firms' hazard to file a patent for the first time, the timing of this effect and the sub-sequent innovation performance of new innovators. Estimation of survival models highlights that being an industrial partner of CERN is associated with an increase in the hazard to patent for the first time. This effect arises with a lag of three to seven years from the beginning of the collaboration, pointing to a relatively slow process of absorption of new ideas. We detect heterogeneity in such an impact, that mostly occurs within small, high-tech firms. Moreover, by looking at the hazard of filling a second patent, we find that most of suppliers becomes "persistent" innovators and this is typically the case for large, high-tech firms.