

Innovation policies and firms' productivity: the Italian Industry 4.0 Plan for digital transformation

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Parole chiave: innovation policies; Industry 4.0; digital transformation; labour productivity; financial statement analysis.

Industry 4.0 technologies radically change industrial processes. National governments have enacted innovation policies to support firms' investments in new technologies and increase productivity growth. The Italian Industry 4.0 Plan (II4.0 Plan) was implemented with this purpose in 2017 and consisted of a horizontal fiscal plan. Using a new methodology that relies on firms' financial accounts rather than survey data, we identify firms that benefited from the II4.0 Plan's incentives and extend the analysis to the population of Italian firms. The results from a Difference-in-Differences regression approach show that the investments spurred by the II4.0 Plan positively affect firms' labour productivity but heterogeneously among size classes, sectors and types of incentive. Hyper and super amortisation and the credit for innovation drive the results. We frame our policy evaluation into the most recent discussion about innovation policies, raising some criticisms on the appropriateness of horizontal policies to foster the digital transition.