

STEFANIA SCROFANI

Personal Website: <https://stefaniascrofani.github.io/>

Nationality: Italian, Current Address: Frankfurt am Main, Date of birth: April 2nd 1998
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RESEARCH INTERESTS

Economics of Innovation, Digital transformation, Technology and Innovation Management, Labour productivity, Policy evaluation, Industrial dynamics

CURRENT POSITION

PhD Trainee - European Central Bank

August 2025 - ongoing

Frankfurt am Main, Germany

Directorate General Economics - Business Cycle Analysis division (DGE/BCA)

Work on two research projects focused on:

- a) intangible investments under the supervision of Dr. Lorena Saiz (Senior Lead Economist - DG-Economics-ECB)
- b) trade uncertainty under the supervision of Dr. Roberto A. De Santis (Senior Lead Economist - DG-Economics-ECB)

EDUCATION

Sant'Anna School of Advanced Studies

October 2021 - expected 2026

Pisa, Italy

PhD Candidate in Economics

Supervisor: Prof. Andrea Mina; Co-Supervisor: Prof. Elena Cefis

ZEW - Leibniz Centre for European Economic Research

April - July 2024

Mannheim, Germany

PhD Visiting Period

Supervisor: Prof. Hanna Hottenrott

Université Côte d'Azur - GREDEG

October - December 2022

Nice, France

PhD Visiting Period

University of Bergamo

2019 - 2021

Bergamo, Italy

M.Sc. in Economics and Data Analysis

EMOS - European Master in Official Statistics

Supervisor: Prof. Elena Cefis

ESC Clermont Business School (France)

September - December 2020

Clermont-Ferrand, France

Erasmus in Business Intelligence

University of Trento (Italy)

2016 - 2019

Trento, Italy

B.Sc. in Economics and Management

PUBLICATIONS

Cefis, E., **Scrofani, S.**, & Tubiana, M. (2025). Innovation policies and firms' productivity: the Italian Industry 4.0 Plan for digital transformation. *The Journal of Technology Transfer*.
<https://doi.org/10.1007/s10961-024-10179-2>

Abstract: 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 type of incentive. Hyper and super amortization 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 digital transformation.

WORKING PAPERS

Scrofani, S., Mina, A., & Cefis, E. (2025). **The Diffusion of Digital Services in the Public Administration: The Leadership Role of Mayors.**

Abstract: This paper examines how various characteristics of top executives influence the decision to digitalize, focusing particularly on the leader's previous career paths, homophily with superiors and tenure. While existing evidence on technology diffusion primarily centres on private organizations, this study takes a novel approach by investigating public institutions, specifically the public administration (PA) of Italian municipalities and their mayors. We employ a fixed effects conditional logit model for panel data, analysing the adoption of the e-payment service provider PagoPA by Italian municipalities from 2012 to 2021. We observe how the previous career of the leader can influence the decision to adopt digital technologies and we reconcile the contradicting findings in the literature about the effect of homophily on innovation, highlighting the moderating role played by the organization's employees human capital. Finally, we find that mayor's tenure has an inverse U-shaped relationship with the adoption of new technologies.

Bisio, L., Cirillo, V., Lucchese, M., Mina, A., & **Scrofani, S.** (2025). **Technological adoption and Firm Resilience: Understanding the Impact of New Digital Technologies.** *LEM Working Paper Series*.

Abstract: This study investigates the impact of new digital technologies on the resilience of firms to external shocks. Using rare comprehensive data on both the adoption of single and multiple new digital technologies, we employ a Difference-in-Differences methodology with propensity score matching to evaluate how digitalization influenced firms' ability to withstand the COVID-19 crisis. We isolate the effects of adopting 1) a single technology, 2) multiple technologies (the breadth of adoption), and 3) technologies that are complementary to one another. The findings provide novel insights into how firms can shape their investments in new digital technologies to increase the benefits of digitalization, and enhance their ability to navigate future crises.

SELECTED WORKS IN PROGRESS

“The Geography of Digitalization in Italian Public Administration”
with Elena Cefis (University of Bergamo) and Andrea Mina (Sant'Anna School of Advanced Studies)

“Data Driven Innovation. Measuring its Effects on Industries, Firms, and Business Models”

PRIN project Prot. 2022JHZL37

with Diletta Abbonato (University of Milano-Bicocca), Gianluca Biggi (Sant’Anna School of Advanced Studies), Marco Guerzoni (University of Milano-Bicocca), Arianna Martinelli (Sant’Anna School of Advanced Studies) and Federico Tamagni (Sant’Anna School of Advanced Studies)

“Innovation Through Mobility: A Study of Employment Flows in Research Institutes and Firm Laboratories”

with Hanna Hottenrott (ZEW - Leibniz Centre for European Economic Research & TUM - Technical University of Munich) and Andrea Mina (Sant’Anna School of Advanced Studies)

OTHER PUBLICATIONS

Krieger, B., **Scrofani, S.**, & Strecke, S. (forthcoming). Firms’ Disclosure of University Ties on Their Website An Explorative Analysis of Its Role for Innovation Performance. *Socio-economic Planning Sciences*

Cefis, E., & **Scrofani, S.** (2025). European National Innovation Policies: A Review of Policy Designs and Scopes. In: Aldieri, L. (eds) *Technological Evolution: How innovations are changing our future*. Springer. https://doi.org/10.1007/978-3-031-85814-7_3

CONFERENCE PRESENTATIONS AND INVITED SEMINARS

2025: Invited seminar at Queen’s Business School (Queen’s University Belfast, UK); Eu-SPRI (University of Dortmund, Germany); DRUID25 (Toronto, Canada); AOM25 (Copenhagen, Denmark)

2024: Rethinking Cluster Conference (Padova, Italy); Eu-SPRI 2024 (Enschede, Netherlands); ISS2024 (Gothenburg, Sweden); DRUID24 (Nice, France); ERSA2024 (Terceira, Portugal); 65th Annual Meeting of the Italian Economic Association (SIE) (Urbino, Italy)

2023: Eu-SPRI 2023 (Brighton, UK)

2022: DRUID22 (Copenhagen, Denmark)

TEACHING AND RESEARCH EXPERIENCE

Teaching Assistant

October 2024 - January 2026

University of Bergamo, Bergamo, Italy

Courses: Economia e politiche dell’innovazione (24 hours, Bachelor) ;

Digital transformation and policies (27 hours, Master);

Innovazione: economia e politiche (20 hours, Master. Only for the a.y. 2024/2025)

Prof. Elena Cefis

Invited Guest Lecturer

October 21, 2025

Queen Mary University of London, London, United Kingdom

Course BUSM189 - Introduction to the Digital Economy and Blockchain

Invited by Dr. Luu Duc Toan Huynh

Curricular Traineeship at ISTAT

March - September 2021

Construction of a composite indicator about socio-economic topics

Eurostat Coding Lab

July - December 2020

Processing of Mobile Network Operator (MNO) data for spatial statistics

PROFESSIONAL SERVICE

Organization: Organizer, together with Alexandra Badort, of the first edition of the YSI @DRUID Workshop: Young scholars in cross-disciplinary research on innovation and dynamics of change, on July 24th 2025 at Rotman School of Management in Toronto (Canada)

Ad-hoc Reviewer: DRUID24, DRUID25, Concordi conference, Socio-Economics Planning Sciences

SUMMER SCHOOLS AND WORKSHOPS

2025: Bessemer Symposium on the Economics of Innovation (University of Sheffield, Sheffield, United Kingdom)

2023: WICK 11 PhD Workshop (Collegio Carlo Alberto, Turin, Italy); REGIS Summer School (Sant'Anna School of Advanced Studies, Pisa, Italy); Advanced Course 2023, 18th Edition "Innovation, Growth and International Production. Models and Data Analysis" (Sapienza University of Rome, Rome, Italy)

2021: Seasonal School – Economics of Innovation and Technological Change (Sant'Anna School of Advanced Studies, Pisa, Italy)

AWARDS AND RECOGNITIONS

Four-year PhD Scholarship in Economics 2021-2025
Sant'Anna School of Advanced Studies (Pisa, Italy)

Scholarship "Top 10 student program" 2019-2020
University of Bergamo (Bergamo, Italy)

Erasmus + Scholarship for Erasmus 2020

Honorius Programme (*Percorso Didattico di Eccellenza PDE*) 2016 - 2019
University of Trento (Trento, Italy)

SKILLS

Programming R, Stata, Python, SAS

Languages Italian (native), English (Full professional proficiency)
German (B1 Goethe Certified 2025), French (basic)

REFERENCES

Prof. Andrea Mina	Sant'Anna School of Advanced Studies (Italy) andrea.mina@santannapisa.it
Prof. Elena Cefis	University of Bergamo (Italy) elena.cefis@unibg.it
Prof. Hanna Hottenrott	Leibniz Centre for European Economic Research (ZEW) & TUM School of Management (Germany) hanna.hottenrott@zew.de
Dr. Lorena Saiz	Senior Lead Economist - DG-Economics (European Central Bank) Lorena.Saiz@ecb.europa.eu