CURRICULUM VITAE

Stefano Bianchini, PhD

Brescia (Italy), October 2, 1985
Nationality: Italian
Status: Married, 2 children (Lorenzo and Arianna)
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CURRENT APPOINTMENT

Full Professor, BETA UMR 7522, Université de Strasbourg (2025)

RESEARCH INTEREST

Economics of science and innovation
Science of science
Applied AI/ML

EDUCATION

PhD in Economics, Scuola Superiore Sant'Anna (Pise) 2015 cotutelle with Université de Strasbourg. Dissertation: «Three essays on firm growth, innovation, and persistent performance», supervisors P. Llerena (Université de Strasbourg) and G. Bottazzi (Scuola Superiore Sant'Anna).

MA in Industrial Engineering, University of Brescia, 2011. Dissertation « Quantitative methods for the assessment of teaching quality of academic instructors», supervisor F. Lissoni (Université de Bordeaux).

PUBLICATIONS IN PEER-REVIEWED JOURNALS (from most recent)

Jurowetzki, R., Hain, D. S., Wirtz, K., & Bianchini, S. (2025). The private sector is hoarding AI researchers: What implications for science? *AI & Society*.
https://doi.org/10.1007/s00146-024-02171-z

Abbonato, D., Bianchini, S., Gargiulo, F., & Venturini, T. (2024). Interdisciplinary research in artificial intelligence: Lessons from COVID-19. *Quantitative Science Studies*, (4), 922–935
https://doi.org/10.1162/qss_a_00329

Damioli, G., Bianchini, S., & Ghisetti, C. (2024). The emergence of a 'twin' transition scientific knowledge base in European regions. *Regional Studies*, 59(1).
https://doi.org/10.1080/00343404.2024.2355998

Bianchini, S., Damioli, G. & Ghisetti, C. (2023). The environmental effects of the 'twin' green and digital transition in European regions. *Environmental and Resource Economics* 84, 877–918. https://doi.org/10.1007/s10640-022-00741-7

Bianchini, S., Moritz M., & Pelletier, P. (2022). Artificial intelligence in science: An emerging general method of invention. *Research Policy*, 51(10), 104604. https://www.sciencedirect.com/science/article/pii/S0048733322001275

Bianchini, S., Llerena, P., Ozel, E. & Ocalan-Ozel, S. (2022). Gender diversity of research consortia contributes to funding decisions in a multi-stage grant peer-review process. *Humanities and Social Sciences Communications*, 9,195. https://www.nature.com/articles/s41599-022-01204-6

Bianchini S., Llerena, P., Patsali, S. (2019). Demand-pull innovation in science: Empirical evidence from a research university's suppliers. *Research Policy, 48, 100005.* [CNRS Rank 1] https://www.sciencedirect.com/science/article/pii/S2590145119300040

Bianchini, S., Pellegrino, G. (2019). Innovation persistence and employment dynamics. *Research Policy*, 48 (5), 1171-1186. [CNRS Rank 1] https://www.sciencedirect.com/science/article/abs/pii/S0048733319300071

Bianchini, S., Llerena, P, & Martino, R. (2019). The impact of R&D subsidies under different institutional frameworks. *Structural Change and Economics Dynamics*, 50, 65-78. [CNRS Rank 3] https://www.sciencedirect.com/science/article/abs/pii/S0954349X18302066

Bianchini, S., Pellegrino, G., & Tamagni, F. (2018). Innovation complementarities and firm growth. *Industrial and Corporate Change*, 27(4), 657-676. [CNRS Rank 1] https://academic.oup.com/icc/article-abstract/27/4/657/4950529?redirectedFrom=fulltext

Bianchini, S., Krafft, J., Quatraro, F., & Ravix, J. (2017). Corporate governance and innovation: Does firm age matter? *Industrial and Corporate Change*, 27(2), 349-370. [CNRS Rank 1] https://academic.oup.com/icc/article-abstract/27/2/349/4157470?redirectedFrom=fulltext

Bianchini, S., Bottazzi, G., & Tamagni, F. (2017). What does (not) characterize persistent corporate high growth? *Small Business Economics*, 48(3), 633-656. [CNRS Rank 2] https://link.springer.com/article/10.1007/s11187-016-9790-1

Bianchini, S., Lissoni, F., Pezzoni, M., & Zirulia, L. (2016). The economics of research, consulting, and teaching quality: Theory and evidence from a technical university. *Economics of Innovation & New Technology*, 25(7), 668-691. [CNRS Rank 2] https://www.tandfonline.com/doi/abs/10.1080/10438599.2015.1114340

Bianchini, S., Llerena, P. (2016). Science policy as a prerequisite of industrial policy. *Economia e Politica Industriale*, 43(3), 273-280. https://link.springer.com/article/10.1007/s40812-016-0040-y

Bianchini, S. (2014). Feedback effects of teaching quality assessment. *Assessment & Evaluation in Higher Education*, 39(3), 380-394. https://www.tandfonline.com/doi/abs/10.1080/02602938.2013.842957?scroll=top&needAccess=true&journalCode=caeh20

Bianchini, S., Lissoni, F., & Pezzoni, M. (2013). Instructor characteristics and students' evaluation of teaching effectiveness: Evidence from an Italian engineering school. *European Journal of Engineering Education*, 38(1), 38-57. https://www.tandfonline.com/doi/abs/10.1080/03043797.2012.742868

ONGOING RESEARCH (submitted and R&R papers)

Bianchini, S., Muller, M., & Pelletier, P. Drivers and barriers of AI adoption and use in scientific research. https://arxiv.org/abs/2312.09843 [*R&R Technological Forecasting and Social Change*]

Bianchini, S., Di Girolamo, V., Ravet, J., & Arranz, D. AI in science: Promises or perils for creativity? https://data.europa.eu/doi/10.2777/6693925 [*R&R Research Policy*]

Hambye-Verbrugghen, J., Bianchini, S., Brockway, P., Aramendia, E., Heun, M. K., & Marshall, Z.. From twin transition to twice the burden: Digitalisation, energy demand, and economic growth. [*R&R Ecological Economics*] https://www.beta-economics.fr/working-papers/2024-61/

Abbonato, D., Bianchini, S., & Llerena, P. "Partnerships is all you need": The development of transformer technology and its impact on science [*R&R Scientometrics*]

POLICY PAPERS and REPORTS (from most recent)

European Commission: Directorate-General for Research and Innovation. *Framework conditions and funding for AI in science – Mutual learning exercise on national policies for AI in science* – First thematic report, Montgomery, J. (editor), Publications Office of the European Union, 2025, https://data.europa.eu/doi/10.2777/7211107

European Commission: Directorate-General for Research and Innovation. *Infrastructures for AI in science – Mutual learning exercise on national policies for AI in science* – Second thematic report, King, R (editor), Publications Office of the European Union, 2025
https://data.europa.eu/doi/10.2777/8581577

European Commission: Directorate-General for Research and Innovation. *Talent for AI in science – Mutual learning exercise on national policies on AI in science* – Third thematic report, Groznik, V. (editor), Publications Office of the European Union, 2025, https://data.europa.eu/doi/10.2777/8779512

European Commission: Directorate-General for Research and Innovation, Bianchini, S., Di Girolamo, V., Ravet, J. and Arranz, D., *Artificial intelligence in science – Promises or perils for creativity?*, Publications Office of the European Union, 2025, https://data.europa.eu/doi/10.2777/6693925

European Commission, Directorate-General for Research and Innovation, Arranz, D., Bianchini, S., Di Girolamo, V., Ravet, J., Trends in the use of AI in science – A bibliometric analysis, Publications Office of the European Union, 2023. https://data.europa.eu/doi/10.2777/418191

Bianchini, S., Bottero, P., Colagrossi, M., Damioli, G., Ghisetti, C. and Michoud, K., Mapping the Scientific Base for SDGs and Digital Technologies, Publications Office of the European Union, Luxembourg, 2023. https://publications.jrc.ec.europa.eu/repository/handle/JRC133613

Bianchini, S., Bottero, P., Colagrossi, M., Damioli, G., Ghisetti, C. and Michoud, K., Sustainable Development Goals and Digital Technologies: Mapping Scientific Research, Publications Office of the European Union, Luxembourg, 2023
https://policycommons.net/artifacts/4374394/sustainable-development-goals-and-digital-technologies/5170873/

TEACHING ACTIVITY

Mathématiques II (24h, Bachelor, *taught in French*): Vectors; matrix algebra; optimization; constrained optimization

Économétrie appliqué (45h, Bachelor, *taught in French*): OLS; instrumental variables; maximum likelihood estimation; limited dependent variables; coding in R

Impact evaluation (20h, Master, *taught in English*): Policy evaluation strategies; impact evaluation techniques (randomized trails, regression discontinuity design, difference-in-difference, propensity score matching; coding in R

Data science (40h, Master, *taught in English*): Supervised learning; regression and classification; coding in Python

Deep learning (40h, Master, *taught in English*): Neural networks (NNs); Convolutional NNs; Recurrent NNs; transformers and LLMs; coding in Python

Conversation on "Artificial Intelligence" (8h, Magistère, *taught in English*): History of AI; AI and labor; AI and the environment; AI in science.

In the past: Industrial economics (72h, Master, Univ. of Brescia); Economics of innovation (36h, Master, Univ. of Brescia); Economics of science (8h, Univ. of Strasbourg and Scuola Superiore Sant'Anna).

Founder and coordinator of the MA Programme « Data Science pour l'Économie et l'Entreprise » (Data Science for Economics and Business, DS2E), FSEG Université de Strasbourg. Details here: https://ecogestion.unistra.fr/formations/masters/analyse-et-politique-economique/parcours-data-science-pour-leconomie-et-lentreprise-PR1208-17653

PUBLICLY FUNDED PROJECTS

As Principal Investigator:

SEED (Sustainable Economies in the Era of Digital transformation), 2022-2025. *Objectives*: The project aims to understand the interlinkages between digitalization and sustainable development, and the contextual factors that can maximize the benefits and minimize the risks of the digital transformation. *Sponsor*: Agence Nationale de la Recherche (ANR). *Budget*: 390 000 €
https://anr.fr/Project-ANR-22-CE26-0013

DInnAMICS (Demand-driven Innovation Assessment in Medical and unIversity eCo-Systems), 2019-2021. *Objectives*: Evaluating the role of public procurement in promoting the development of AI and computer-assisted technologies in the domain of health. *Sponsor*: Agence Nationale de la Recherche (ANR). *Budget*: 165 000 €
https://anr.fr/Project-ANR-18-CE26-0017

ARISE (ARtificial Intelligence in the Science systEm), 2020-2022. *Objectives*: Analysing socio-economic transformations triggered by Artificial Intelligence (AI) through an in-depth assessment of the diffusion and the impacts of AI in the science system. *Sponsor*: CNRS. *Budget*: 30 000 € + 3-year PhD scholarship.

Robotisation, environmental impacts, and the dynamics of wages and employment, 2019-2020. *Objectives*: Analysing the interrelationship between innovations (AI and robots), wages and employment at the firm- and industry-level. *Sponsor*: PUD-PROGEDO. *Budget*: 10 000 €

As partner:

GIGA (Gender bias In Grant Allocation), 2019-2021. Coordinated by P. Llerena (Université de Strasbourg). *Sponsor*: Agence Nationale de la Recherche (ANR).

UTTO (University Technology Transfer and its Optimization), 2016-2018. Coordinated by N. Carayol (Université de Bordeaux) and P. Llerena (Université de Strasbourg). *Sponsor*: Agence Nationale de la Recherche (ANR).

ASTRAL (Assessment of Science and Technology Research in Alsace), 2014-2015. Coordinated by J. Lane (NYU) and P. Llerena (Université de Strasbourg). *Sponsor*: Gutenberg Chair, Region Alsace.

STARMETRICS (Science and Technology for America's Reinvestment: Measuring the EffecTs of Research on Innovation, Competitiveness and Science), 2014-2015. Coordinated by J. Lane (NYU). *Sponsors*: NIH, NSF, the U.S. Department of Agriculture, and the Environmental Protection Agency.

REFEREE ACTIVITY

Reviewer for: Economic Geography; Economics of Innovation and New Technology; Energy Strategy Reviews; Eurasian Business Review; Industrial and Corporate Change; Industry and Innovation; Journal of Economic Behavior and Organization; Journal of Small Business and Enterprise Development; Journal of Evolutionary Economics; PLOS ONE; Quantitative Science Studies; Research Policy; R&D Management; Science and Public Policy; Scientometrics; Small Business Economics; Technovation; The Annals of Regional Science

External reviewer (evaluator), Agence Nationale de la Recherche (ANR), France [since 2019]

External reviewers for "Qualification MCF" sections 05/06 [since 2024]

SUPERVISIONS

PhDs:

Pierre Pelletier (2019–2023): "Artificial intelligence in science: Diffusion and impact".
https://theses.fr/2023STRAB011

Kevin Wirtz (2019–2023): "Scientific collaboration and mobility : A creativity perspective"
https://theses.fr/2023STRAB004

Diletta Abbonato (2020–2024): "The role of artificial intelligence for societal challenges"
https://theses.fr/2024STRAB004

Jérôme Hambye (2021–ongoing): "Digitalisation, energy demand, and economic growth"

Kévin Michoud (2023–ongoing): "Mapping the scientific base for SDGs and digital technologies"

Mathilde Clerc (2022–ongoing): "The impact of digital technologies on the environment"

Postdoc:

Andrea Borsato (2020–2022): "Modelling employment effects of automation technologies" [co-supervised with A. Lorentz]

PhD committee:

Francesca Isola (University of Siena, May 2024): "Three essays on intrahousehold inequality and separation outcomes: A European perspective"

Olimpija Hristova Zaevska (Copenhagen Business School, June 2024): "Industry 4.0 ecosystems – Design, value creation, and impact across European regions"

Sylvain Fontaine (Sorbonne University, December 2024): "The diffusion of Artificial Intelligence into neuroscience: A multiscale approach to the genericity of a research-technology"

OTHER & RESPONSABILITIES

Director of the Chair "Data Science for Economics and Business", Fondation Université de Strasbourg
(active budget 205 000 € - 2019-2021, supported by *Crédit Agricole* and *Mazars*)
(active budget 120 000 € - 2022-2024, supported by *Crédit Agricole*)

Winner of the "Guy Ourisson Prize 2020" (Gutenberg Circle). The prize is awarded each year to up to five most promising researchers under 40 in the Alsace region in any field.
http://www.cercle-gutenberg.fr/prix-guy-ourisson-et-autres-prix-jeunes-chercheurs/presentation/

Member of the Editorial Review Board : Industry and Innovation, Small Business Economics

Member of the Board of Management for "The International Schumpeter Society" (2020-2022)
https://www.issevec.uni-jena.de/

Editorial Board (guest editor with A. Coad and R. Brown), special issue "High growth firms" in Cuaderno de Economia (2018)
https://revistas.unal.edu.co/index.php/ceconomia/issue/view/4937

Expert groups / consulting activities for:
- European Commission: DG-JRC-Modelling, Indicators and Impact Evaluation
- European Commission: DG-RTD-Research and Innovation
- OECD: Structural Policy Analysis Division, Economics Department
- Private sector [data analytics, AI/ML]

Rapporteur of the Mutual Learning Exercise on "*National Policies for AI in Science*" (2024-2025)
https://projects.research-and-innovation.ec.europa.eu/en/statistics/policy-support-facility/psf-challenge/mutual-learning-exercise-national-policies-ai-science

Other stuff here: https://github.com/merlino-sb

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