

MATTEO BURATO

m.burato@imperial.ac.uk [website](#)

EDUCATION

Ph.D. in Strategy and Sustainability Imperial College London	September 2020 – June 2026 (Expected)
<ul style="list-style-type: none">Dissertation: The emergence of sustainability strategies and their financial and non-financial consequencesAdvisors: Maurizio Zollo, Robert KosowskiCoursework: Distinction (obtained a Master of Research degree)	
Visiting Ph.D The Wharton School, University of Pennsylvania	January 2024 – December 2024
<ul style="list-style-type: none">Projects: Leveraging AI and big data to map sustainability activities and stakeholder reactionsHost: Witold Henisz	
Master of Science in Economics Bocconi University; UCLouvain; UNamur (joint degree)	September 2018 – September 2020
<ul style="list-style-type: none">Thesis: A model of sustainability initiatives generation and allocation in a profit-maximizing firm environmentAdvisor: Benoît DecerfGrade: 110 cum laude/110	
Bachelor of Science in Economics and Finance Bocconi University, Grade: 110/110, Advisor: Riccardo Zecchina (thesis on machine learning to investigate hedge funds' style and performance), Exchange: Victoria University of Wellington (GPA: A)	September 2015 – September 2018

RESEARCH INTERESTS

Non-Market Strategy, Stakeholder Strategy, Corporate Sustainability, Machine Learning Inference, Bayesian and Formal Modeling, Cooperative Game Theory, Resource-Based View, International Business, Organizational Cognition and Systems Thinking

PUBLISHED PAPERS

- Burato, M.**, Tang, S., Vastola, V. & Cenci, S. (2023). *Organizational System Thinking as a Cognitive Framework to Meet Climate Targets*. Proceedings of the National Academy of Sciences 120, 41 [available here](#)

This paper focuses on the identification of system-thinking traits in organizations. In particular, I theorize that an emergent firm-level property, organizational system thinking (OST), is a significant antecedent in the effectiveness of emission reduction practices to fight climate change. The findings imply that the emission pathways of companies that embrace OST are significantly more likely to align with global emission reduction targets.

- Cenci, S., **Burato, M.**, Rei, M., & Zollo, M. (2023). *The alignment of companies' sustainability behavior and emissions with global climate targets*. Nature Communications 14, 7831 [available here](#)

This paper describes the results of an extensive machine learning-based analysis of non-financial disclosure data to assess sustainability actions by companies and their effect on climate pathways. A key finding of the study is that companies that are at the forefront of the climate transition invest strongly in r&d and sustainable transition activities, while laggards significantly over-invest in risk-mitigation. This article currently has more than 50 citations on Google Scholar.

- Cenci, S., **Burato, M.**, Rei, M., & Zollo, M. (2025). *Assessing the effectiveness of interdependent corporate sustainability choices*. npj Clim. Action 4, 25. [available here](#)

This paper develops an integrated (environmental and financial) fitness landscape perspective to look at corporate sustainability choices. By using machine learning techniques (random forests for landscape estimation and genetic algorithms for problemistic search), we estimate the landscape and its ruggedness (epistasis) empirically. The results document a strong degree of interrelation between environmental and financial domains, and that strategic behavior in the former has consequences for the latter.

- **Burato, M.** (2025). *Sustainability Strategies and Firm Value*. Job market paper, presented at CCC 2025

This paper builds a framework, grounded in complexity theory, that links the value of sustainability strategies to their ability to manage a multi-level feedback loop between firm operations and systemic outcomes. Firms must develop strategic complexity, the degree of sophistication of their strategies in terms of the breadth of implied sustainability behaviors, to match the systemic complexity of the environment they are embedded in. Due to cognitive and organizational costs, this relationship is not linear but follows an inverted U-shape. Furthermore, this curve shifts when exogenous shocks alter systemic complexity. The construct is measured by applying a hierarchical Bayesian model to a dataset of over 200,000 corporate sustainability initiatives by 1,186 firms to measure the complexity of their enacted strategies. The identification strategy leverages the European Union's "Fit for 55" policy as a quasi-natural experiment in a continuous treatment, triple difference-in-differences framework.

- **Burato, M.**, Pellegrino, F., & Zollo, M. (2025). *Heterogeneity in Corporate Sustainability Initiatives and Stock Returns*. under review at Management Science, finalist for Best Methods paper at SMS Conference 2025, presented at SEI Conference 2025, SMS Conference 2025

This paper re-examines the relationship between corporate sustainability behavior and stock returns. The analysis is based on portfolios of stocks according to three firm-level signals with increasing levels of strategic focus on sustainability activities (advocacy, preparation, and transformation) based on the retrieval, via AI / transformer models, of 1.3 million initiatives from 75,000 sustainability reports. The findings show that only companies with higher transformation are linked to higher future ROA and enjoy significant positive alpha. Furthermore, we document a clear market learning curve that suggests markets are becoming more efficient in pricing sustainability.

- **Burato, M.**, & Henisz, W. (2025). *Corporate purpose as a value redistribution policy in the stakeholder firm*. target journal: Academy of Management Review

This paper develops a novel formalization of the theory of the firm that includes key insights from stakeholder governance, including collective action problems such as shirking and infighting, as well as externalities of the production process. The theoretical model is rooted in cooperative game theory and grants management key levers to ensure the well-functioning of the stakeholder coalition and ensure long-term value generation. In particular, we simulate different redistribution policy announcements (a promised *corporate purpose*) and their effect cascades on stakeholder behavior and firm performance both formally and via simulations.

- **Burato, M.**, & Henisz, W. (2025). *Capitalizing Sustainability Investments*. target journal: Strategic Management Journal

This paper links the existing open question of the documented increase in intangible capital that has been a key feature of market evaluation in the last decade with the role of sustainability and CSR activities by corporations. The analysis relies on the measurement of latent intangible capital accumulation and depreciation from multiple sources, including sustainability investments, using structural equation modeling. Our preliminary findings suggest that there is significant heterogeneity in firm efficiency in utilizing intangible capital from sustainability, but once it is established, the link to both financial and non-financial performance is strong.

- **Burato, M.**, Staessens, M., & Vastola, V. (2025). *Search behavior with conflicting performance feedback across multiple goals*. target journal: Organization Science

This paper examines corporate problemistic search behavior when faced by performance aspirations on two different goals, a financial and an environmental one. The measurement of environmental search behavior intensity is based on changes in the portfolio of environmental sustainability initiatives year-on-year, while both historical and peer performance converge in forming aspiration level both on environmental (GHG emissions) and financial (net income) terms.

- **Burato, M.**, & Vastola, V. (2024). *Doing Well by Acting Good: Uncovering mediation among financial and nonfinancial performances*. target journal: Strategic Management Journal, presented at SMS Conference 2024

This paper addresses the business case for Corporate Social Responsibility (CSR) by investigating if the "substantiveness" of a firm's environmental actions impacts its financial performance. The analysis of a large dataset of sustainability initiatives reveals that substantive actions are associated with reduced GHG emissions and, subsequently, through bootstrapped mediation analysis, improved operating performance.

- **Burato, M.**, Vastola, V., Tang, S., & Cenci, S. (2024). *Organizational System Thinking as a Strategic Tool to Manage Crises*. target journal: Management Science

This paper is a direct follow-up on the *PNAS* that established organizational system thinking (OST) as a construct. The core argument is that firms with a higher capacity for system thinking develop a more diversified portfolio of sustainability actions. This diversity is theorized to enhance a firm's stability during a crisis by mitigating low-probability threats. The analysis is centered around a DiD design around the 2014 oil crisis.

RESEARCH ASSOCIATIONS AND RELATED ACTIVITIES

- 2025 Strategic Management Society annual conference: paper - best methods paper finalist
- 2025 Strategy, Entrepreneurship, and Innovation (SEI) doctoral consortium and faculty workshop: paper
- 2025 Conference on Competitiveness and Cooperation (CCC) conference: paper
- 2025 Academy of Management annual conference: paper symposium
- 2024 Strategic Management Society annual conference: paper - doctoral consortium
- 2024 Strategy Science annual conference: doctoral consortium
- 2024 Corporate Purpose conference & Academy of Management annual conference: poster
- 2022 Alliance for Research on Corporate Sustainability (ARCS) annual conference: paper

SERVICE

- Reviewer for Physica A: Statistical Mechanics and its Applications
- Reviewer for Nature Humanities and Social Sciences Communications

TEACHING AND SUPERVISION WORK

MBA Teaching

- Teaching tutor (frontal classes, office hours, and grading) for Global MBA elective Advanced Strategy in a Stakeholder Economy. 2023 and 2024 cohorts. Teaching evaluation: 4.42/5
- Teaching tutor (frontal classes, office hours, and grading) for Global MBA elective Advanced Strategy, 2022 cohort. Teaching evaluation: 4/5

Master's Teaching

- Teaching assistant (support and grading) for Master's module Sustainable Finance. 2025 cohort. Teaching evaluation: (pending)

MBA Theses

- Carlos Cadò, at Imperial College London, on a thesis regarding superior merger and acquisition performance of firms with high previous ESG performance.

Master's Theses

- Noah Maurer, at Rotterdam School of Management (now PhD student at Imperial College London), on a thesis regarding organizational systems thinking's microfoundation in sustainability consulting companies.
- Edson Charikinya, at USB Stellenbosch, on a thesis regarding sustainability activities in the mining sector.

High School Projects

- I collaborated with the Lumière Foundation (including pro bono work) to help students from disadvantaged backgrounds complete a research project that could propel them to higher education.

LANGUAGES & CERTIFICATIONS

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| • Italian: native speaker | • French: basic (B1) |
| • English: fluent | • German: basic (B1) |

REFERENCE LETTERS

- Maurizio Zollo
- Witold Henisz
- Dmitry Sharapov