Paola D'ORAZIO

Ph.D., Economics and Statistics

Associate Professor, Economics

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EDUCATION

2026 HDR, Economics and Mathematics Sciences, Economics, University of Paris I Panthéon-Sorbonne, France

2024 Habilitation. Italian National Scientific Qualification (ASN) 13/A2 – Economic Policy. Ministry of University and Research (Italy), Italian Ministry of Education, University and Research, Italy

2015 Ph.D., Economics and Statistics, University of Pescara, Italy

2011 Master in Management of International Cooperation for Development, University of Pescara, Italy

2009 Master (Laurea Specialistica) in Local and International Cooperation and Development, University of Bologna, Italy

2005 Bachelor, International Relations and Diplomatic Sciences, University of Bologna, Italy

RESEARCH INTERESTS

Economics, Monetary and Financial Economics, Quantitative Methods, Sustainable Finance

PROFESSIONAL EXPERIENCE

ACADEMIC:

2023 - 2025 Junior Professor of Economics, Chemnitz University of Technology, Chemnitz, Germany

2020 - 2023 Research Fellow - Centrum für Umweltmanagement, Ressourcen und Energie, Ruhr University Bochum, Bochum, Germany

2018 - 2023 Research Fellow - Research Department Closed Carbon Cycle Economy (CCCE), Ruhr University Bochum, Bochum, Germany

2016 - 2023 Teaching and Research Assistant, Ruhr University Bochum, Bochum, Germany

CONSULTING EXPERIENCE

2025 Scientific expert (consultant), OECD, France

2024 - 2025 Scientific expert (consultant), South Africa Reserve Bank (Central Bank of South Africa), South Africa

2024 Scientific expert (consultant), OECD, France

2024 - 2025 Scientific expert (consultant), Deutschen Gesellschaft für Internationale Zusammenarbeit , Germany

2022 - 2023 Short term consultant, The World Bank, USA

COURSES TAUGHT

- Energy and environmental economics
- Climate risks, finance, and policy: challenges and strategies for a sustainable future
- International economics, Bachelor in international business
- Topics and methods in sustainable macro-finance research
- Agent-based and behavioral macroeconomics
- Advanced seminar in ecological economics research
- Economics of climate change and sustainable finance
- Umwelt, ressourcen und energie
- Complexity economics
- Agent-based models: climate economics & finance
- Iaere school green and climate finance
- Green and sustainable finance
- Behavioural macroeconomics
- Spezielle aspekte der pluralen makröokonomik
- Intermediate macroeconomics
- Research in advanced macroeconomics
- Macroeconomics i
- Macroeconomics ii
- Principles of macroeconomics
- International finance
- Complexity and behavioral macroeconomics
- Monetary and financial economics
- Experimental economics

INTELLECTUAL CONTRIBUTIONS

Papers in refereed journals

Published

D'Orazio P., (2026), The political economy of climate-related financial policies: Creating new paradigms or reinforcing old ones?, *Socio-Economic Review*, 24(2), pp. 741–768

D'Orazio P., Nguyen H. S., Pham A. D., (2026), When pandemics meet climate risk: An agent-based model of non-linear macroeconomic dynamics under compound stress, *Journal of Economic Dynamics & Control*, 189(August 2026), pp. 105356

D'Orazio P., (2025), Addressing climate risks through fiscal policy in emerging and developing economies: what do we know and what lies ahead?, *Energy Research & Social Science*, 119(2025), pp. 103852

D'Orazio P., (2025), Climate risks and financial stability: Evidence on the effectiveness of climate-related financial policies, *International Review of Financial Analysis*, 105(2025), pp. 104304

D'Orazio P., (2025), Global change and financial policy: Tackling climate risks, biodiversity loss, and pandemic challenges, *Encyclopedia of Monetary Policy, Financial Markets and Banking*, 2(NA), pp. 677-685

D'Orazio P., Pham A. D., (2025), Evaluating climate-related financial policies' impact on decarbonization with machine learning methods, *Scientific Reports*, 15(15), pp. 1694

D'Orazio P., Pham A. D., Nguyen H. S., (2025), CliMaPan-Lab: An open-source Python framework for agent-based macroeconomic simulation of climate- and pandemic-related systemic risks, *SoftwareX*, 32(December 2025), pp. 102408

D'Orazio P., (2024), Assessing the fiscal implications of changes in critical minerals' demand in the low-carbon energy transition, *Applied Energy*, 376(Part A), pp. 124197

D'Orazio P., Hoffart F., Claudia K., (2024), Editorial - Fostering the energy transition amidst geopolitical and climate risks in a post-covid world, *Frontiers in Environmental Economics*, 3(2024), pp. 1449479

D'Orazio P., (2023), A global database for climate-related financial policies, *BMC Research Notes*, 16(137), pp. 1-7

D'Orazio P., (2023), Banking for Sustainability: A Necessary Global Shift, *One Earth*, 6(10), pp. 1271-1276

D'Orazio P., (2023), Climate change and macro-financial risks: financial policy responses for an orderly low-carbon transition, *Environmental Research: Climate*, 2(1), pp. 013002

D'Orazio P., (2023), Navigating financial stability through the dual challenges of climate change and pandemics, *Current Opinion in Environmental Sustainability*, 65(101386), pp. 101386

D'Orazio P., Popoyan L., (2023), Dataset for the climate-related financial policy index (CRFPI), *Data in Brief*, 48(NA), pp. 109044

D'Orazio P., Popoyan L., (2023), Do monetary policy mandates and financial stability governance structures matter for the adoption of climate-related financial policies?, *International Economics*, 173(NA), pp. 284-295

, D'Orazio P., Dirks M., (2022), Exploring the effects of climate-related financial policies on carbon emissions in G20 countries: a panel quantile regression approach, *Environmental Science and Pollution Research*, 29(NA), pp. 7678–7702

D'Orazio P., (2022), Mapping the emergence and diffusion of climate-related financial policies: Evidence from a cluster analysis on G20 countries, *International Economics*, 169(2022), pp. 135-147

D'Orazio P., Löwenstein P., (2022), Mobilising investments in renewable energy in Germany: which role for public investment banks?, *Journal of Sustainable Finance and Investment*, 12(2), pp. 451-474

D'Orazio P., Popoyan L., (2022), Realising Central Banks' Climate Ambitions Through Financial Stability Mandates, *Intereconomics*, 57(NA), pp. 103–111

, D'Orazio P., (2021), Towards a post-pandemic policy framework to manage climate-related financial risks and resilience, *Climate Policy*, 21(10), pp. 1368-1382

D'Orazio P., (2019), Income inequality, consumer debt, and prudential regulation: An agent-based approach to study the emergence of crises and financial instability, *Economic Modelling*, 82(2019), pp. 308-331

D'Orazio P., Popoyan L., (2019), Fostering green investments and tackling climate-related financial risks: Which role for macroprudential policies?, *Ecological Economics*, 160(2019), pp. 25-37

D'Orazio P., Valente M., (2019), The role of finance in environmental innovation diffusion: An evolutionary modeling approach, *Journal of Economic Behavior & Organization*, 162(2019), pp. 417-439

D'Orazio P., (2017), Big data and complexity: Is macroeconomics heading toward a new paradigm?, *Journal of Economic Methodology*, 24(4), pp. 410-429

Forthcoming

D'ORAZIO P., (2026), Climate, nature, and the uneven expansion of financial governance, *Regulation and Governance*, 21(1), pp. 1-11

D'Orazio P., (2025), Financial regulation for climate resilience: a comparative analysis across African economies, *Climate Policy*, 00(00), pp. 1-16

D'Orazio P., Hertel T., Kasbrink F., (2024), No need to worry? Estimating the exposure of the German banking sector to climate-related transition risks, *Journal of Sustainable Finance and Investment*, NA(NA), pp. 1-29

Papers in non-refereed journals

Published

D'Orazio P., Thole S., (2022), Climate-related financial policy index: A composite index to compare the engagement in green financial policymaking at the global level, *Ecological Indicators*, 141(August 2022), pp. 109065

Communications in refereed conferences

International

D'Orazio P., (2026), *Climate-related financial-policy actions and the direction of cross-border FDI to mineral-exposed economies* International and Financial Dimensions of Critical Minerals Conference, Lima, Peru

D'Orazio P., Karlström P., Ossandon Busch M., Sarmiento M., (2026), *Pricing nature across borders: Global banks'response to nature- linked financial policies* World Biodiversity Forum, Davos, Switzerland

Other conference and seminar presentations

International

D'Orazio P., (2026), *Climate Financial Regulation, Mining FDI, and the Direction of International Capital Flows* 15th FAERE Thematic Workshop French Association of Environmental and Resource Economists, Orleans, France

D'Orazio P., (2026), *Climate-related Financial Policymaking: From Commitments to Credit Reallocation* International Symposium - Banking on Climate Action: The role of Banks in the Climate Crisis, St. Gallen, Switzerland

D'Orazio P., (2026), *Discussant Remarks The Ecosystem Service Degradation Sensitivity Indicator (EDSI) A New Framework for Understanding the Financial Risk Repercussions of Nature Degradation* Banque de France Research Conference on Climate- and Nature-Related Risks in the Economic and Financial System, Paris, France

D'Orazio P., (2026), *Do Banks Reallocate Credit Across Sectors Under Rising Nature Pressure? Evidence from Southern Africa* IFABS LONDON, London, United Kingdom

D'Orazio P., (2026), *Expansion without transformation? Climate, nature and the depth of change in financial governance* Transforming Finance for Society, Rotterdam, Netherlands

D'ORAZIO P., Karlström P., Sarmiento M., Ossandon Busch M., (2026), *Pricing nature across borders: Global banks' response to nature-linked financial policies* London School of Economics - CETEX, London, United Kingdom

D'Orazio P., (2025), *Assessing climate-related transition risks in southern African banking sectors: A quantitative analysis of exposures and policy response framework* Southern African Development Community Conference, online, Tanzania

D'Orazio P., (2025), *Climate-related financial policies and financial stability: dynamic and heterogeneous effects* 6th Financial Economics Meeting (FEM-2025), Paris, France

D'Orazio P., (2025), *The political economy of climate-related financial policies: Creating new paradigms or reinforcing old ones?* GREEN FINANCE RESEARCH ADVANCES - Banque de France, Paris, France

D'ORAZIO P., (2024), *Climate-related financial policy index: A composite index to compare the engagement in green financial policymaking at the global level* Bank of England, London, United Kingdom

D'ORAZIO P., (2024), *No need to worry? Estimating the exposure of the German banking sector to climate-related transition risks.* DIW Berlin, Berlin, Germany

Chapters in books

Published

D'Orazio P., Popoyan L., (2025), A tale of two crises: Monetary policy and financial (in)stability implications of climate change and pandemics, in: Louis-Philippe Rochon, Sylvio Antonio Kappes, and Guillaume Vallet(Eds.), *Financial instability and the role of central banks and monetary policy, 9781035302154, Edward Elgar Publishing, chapter 8, pp. 139–164*

D'Orazio P., Valente M., Amendola M., (2024), Policies to mobilize finance for disruptive technologies, in: Catalina Spataru, Xiaojing Lv(Eds.), *The Elgar Companion to Energy and Sustainability, 978 1 03530 748 7, Edward Elgar Publishing, chapter 23, pp. 355-371*

D'Orazio P., Valente M., Popoyan L., (2023), Green central banking in times of climate uncertainty, in: Samsul Alam, Sergey Sosnovskikh(Eds.), *Environmental Finance and Green Banking Contemporary and Emerging Issues, 9781003206194, Routledge, London, chapter 4, pp. 1-21*

D'Orazio P., (2023), The Role of Bank Regulators in the Promotion of Green and Climate Finance, in: Chrysovalantis Gaganis, Fotios Pasiouras, Menelaos Tasiou, Constantin Zopounidis(Eds.), *Sustainable Finance and ESG Risk, Management, Regulations, and Implications for Financial Institutions, 978-3-031-24282-3, Palgrave-Macmillan, chapter 7, pp. 173–196*

D'Orazio P., (2023), The Politics of Climate Finance and Policy Initiatives to Promote Sustainable Finance and Address ESG Issues, in: Chrysovalantis Gaganis, Fotios Pasiouras, Menelaos Tasiou, Constantin Zopounidis(Eds.), *Sustainable Finance and ESG Risk, Management, Regulations, and Implications for Financial Institutions, 978-3-031-24282-3, Palgrave-Macmillan, chapter 8, pp. 145–171*

Research reports

D'ORAZIO P., Pham A. D., (2025), *Evaluating Climate-Related Financial Policies with Machine Learning: Implications for Global Decarbonization*, SUERF

D'ORAZIO P., Hertel T., Kasbrink F., (2024), *Is the German banking sector exposed to climate-related transition risks?*, SUERF

D'ORAZIO P., (2024), *COVID-19 and Climate Risks: What are the Consequences for Financial Market Stability?*, SUERF

D'ORAZIO P., (2022), *Measuring the engagement in climate- related financial policymaking: the climate-related financial policy index*, SUERF

Working papers

D'ORAZIO P., Karlström P., Ossandon Busch M., Sarmiento M., (2026), *Pricing nature across borders: global banks' response to nature-linked financial policies*

Grants

2025 Climate Risk and Defence Finance: Minimum Social Safeguards in European Capital Markets, Institut Louis Bachelier - Fondation du Risque (France)

2024 Assessing Climate-Related Transition Risks in Southern Africa, South Africa Reserve Bank (Central Bank of South Africa) (South Africa)

2021 Computational approach that embeds Medical and Psychological research and develops Normative Criteria for socio-economic policy Evaluation, German Research Foundation (DFG) (Germany)

2012 Institute for New Economic Thinking - CIGI conference (Canada), Institute for New Economic Thinking (USA)

EDITORIAL ACTIVITY

Editor in a special issue of a peer reviewed journal

Eurasian Economic Review

Editor in an academic journal

2021 PLOS Sustainability and Transformation

2020 Eurasian Economic Review

Guest editor of an a academic journal

Frontiers in Environmental Economics

Advances in Complex Systems

Reviewer in an academic journal

Climate Policy

Climatic Change

Current Climate Change Reports

Current Opinion in Environmental Sustainability

Current Research in Environmental Sustainability

Ecological Economics

Economic Analysis and Policy

Economic Modelling

Energy

Energy Research and Social Science

Environmental and Sus- tainability Indicators

Environmental Science and Policy

Eurasian Economic Review

European Journal of Political Economy

Finance Research Letters

International Journal of Finance and Economics;

International Journal of Fi- nancial Markets

Institutions and Money

International Journal of Sustainable Development;

International Review of Financial Analysis;

PROFESSIONAL SERVICE

Chair of the organizing committee of an academic conference

Artificial Economics Conference, Italy

Committee/task force member

European Association of Environmental and Resource Economists, Norway

European Association of Environmental and Resource Economists, Belgium

European Association of Environmental and Resource Economists, United Kingdom

European Association of Environmental and Resource Economists, Cyprus

European Association of Environmental and Resource Economists, Italy

Social Simulation Conference, United Kingdom

Social Simulation Conference, Poland

Social Simulation Conference, Germany

Duke Forest Conference, USA

Invited Lecturer

Guest Speaker at the Financial Stability Conference at Central Bank of Hungary, Hungary

The Mathematics of Climate and the Environment at Institute Henri Poincare, France

INSPIRE workshop in association with GRASFI, United Kingdom

Conference on Central Banking and Sustainability Conference - A Roadmap to 2020, United Kingdom

Expert Roundtable: Macro-financial risks and climate change, United Kingdom

Southern African Development Community Conference

Climate Hub Seminar at the Bank of England, United Kingdom

Presentation in a seminar

Seminar at DIW Berlin, Germany

Session chair in an academic conference

Social Simulation Conference, Germany

European Association of Evolutionary Political Economy, Italy

European Association of Evolutionary Political Economy, Italy

31st International Conference Computing in Economics and Finance Society for Computational Economics, Chile

RESEARCH ACTIVITIES

COMMITTEE CHAIR

Member of a recruitment jury (orals)

2026 - 2026 member of jury for BIB and PGE oral examinations, IÉSEG School of Management, France

Supervision of Ph.D. Thesis:

2026 Co-director, Essays in Environmental ABM, Università degli studi di Pavia

2026 Director, Essays in Agent Based Modeling