





FORUM INNOVATION 2022 May 5-6, 2022 Bruges



Call for papers

Research and Innovation Policies in Europe: Evolution, Scope and Perspectives

Keynote speakers

- **-Philippe AGHION**: Professor at the College de France and at the London School of Economics, and a fellow of the Econometric Society and of the American Academy of Arts and Sciences
- **-James GALBRAITH**: Professor at the <u>Lyndon B. Johnson School of Public Affairs</u> and at the Department of Government, <u>University of Texas at Austin</u>
- -Matthias WEBER: Professor at the Austrian Institute of Technology







Innovation is a key driver of economic growth and is essential to creating better jobs, building a greener society, and improving our quality of life, but also to maintaining EU competitiveness in the global market. However, data show that while European companies still account for one-quarter of total industrial R&D in the world, Europe is lagging behind the US and China in terms of innovation and technology (Grassano et al., 2020), and Europe's ability to innovate is somewhat misallocated among and within Member States and sectors. In addition, Europe is increasingly challenged by the next generation of frontier technologies. Despite some notable exceptions, most dominant high-tech players today are either American or Chinese.

Innovation policies have changed in the past few decades. They were traditionally based on notions of market failure or system failure and associated with the willingness to reinforce growth and competitiveness (Frenken, 2017). This is due to a strong intellectual link made between innovation (especially technological innovations) and economic progress (Godin, 2019). They have recently evolved to embrace more complex and systemic challenges like environmental challenges and Sustainable Development Goals (SDGs). Including these is an important objective of the European Commission's (EC) proposal for Horizon Europe: the EU framework programme for Research and Innovation (R&I) 2021–2027 (Kastrinos, Weber, 2020). Transformative change and mission-oriented policies are thus at the center of the agenda at international and European levels (Fagerberg, 2018, Schot, Steinmueller, 2018, Robinson, Mazzucato, 2019, Mazzucato, 2019).

Obviously, Europe needs to regain its competitive edge and has a leading role to play in stimulating the societal transformations needed to solve Grand Challenges. Raising the capacity for innovation and changing the locked-in undesirable trajectories of existing systems depends on developing many levers. First, firms must have incentives to develop new practices, and be able to finance them. Small and medium enterprises often stick to common practices and adapt to competition by means other than innovation, as they lack a culture of innovation. Second, even if firms are willing to invest in innovation, their access to investment funding might be hindered by financial barriers: venture capital is successful in raising capital for start-ups in some sectors, but often fails to acknowledge the potential of existing businesses. Large companies, developing open innovation strategies to reinforce their knowledge capital, continue to dominate markets and play the double game of investing in entrepreneurship and creativity and appropriating the returns in order to increase their market power (Laperche, 2017). In this matter, the strategies for promoting intellectual property become decisive (Baudry, Dumont, 2018). Third, socio-technical system transformation requires not only technological change but also a change in skills, infrastructures, regulations,







and ways of living. Whatever the sector or field, systemic innovation, involving technological, but also organizational and social change, is thus needed (Uzunidis, 2020) This implies an involvement of multiple actors in the framing of policies in the aim of democratizing innovation, including not only firms and political bodies but also scientists, non-governmental associations, and more broadly civil society (Joly, 2017).

In order to spur innovation and stimulate societal transformations, R&I policies have a renewed role to play. In this respect, the EC has developed the concept of an 'Innovation Union', which aims to make the EU a world-class science and innovation performer. This flagship initiative aims to improve conditions and access to finance for R&I in the EU to turn innovative ideas into products and services that create growth and jobs, and to create a genuine single European market for innovation. At the same time, the EC has developed five missions to solve grand challenges like cancer; adapting to climate change; protecting oceans and inland waters; living in climate-neutral and smart cities; and ensuring soil health and food. Each mission will implement a portfolio of actions mobilizing a wide range of resources, disciplines, R&I activities and actors, aiming to reach a time-bound measurable target and generating expected realistic impacts.

However, new economic activities often do not take off and changing existing systems is a complex task. Sometimes they are blocked by legal restrictions aimed at protecting some sectors from competition, or by the lack of regulations that could support change (a ban on pesticides). Moreover, policies related to education and innovation often privilege applied over fundamental research (Archibugi, Filippetti, 2018). Transfers from universities and research centers to industry has been raised as an indicator of scientific success, as well as the objective of research and policy, as shown by the continuous interest in the concepts of the Entrepreneurial University (Etzkowitz et al. 2000, Audretsch, Belitski, 2021) and triple (or more) helix concepts (Carayannis, Campbell, 2017). However, these transfers are limited at best, on the one hand, and on the other hand they can orientate science toward short term results that could be contradictory to systemic socio-technical change (Uzunidis, 2018). Raising R&D budgets is of little avail if there is no combined decision on structural and sectoral policies to sustain investment in innovation. Regional policies have focused on smart specialization (Foray, 2014), as well as the creation of technology clusters in order to reinforce knowledge sharing in the perspective of innovation (Leick, Gretzinger, 2020). Smart specialization policy is now studied in the context of socio-technical transitions and sustainable regional development (Veldhuizen, 2020). But the operationalization of smart specialization policy has been rather limited due to the lack of a clear political framework (Balland et al., 2019). Moreover, these policies have not always been successful and conducive to the reduction of







inequalities among regions. While some local initiatives have been able to create specialized clusters, other policies seem to have created white elephants. The gap between the core and periphery in the EU with regard to science, technology, and innovation is even widening and call for the creation of new development paths that go beyond "science as usual" in peripherical European countries (Švarc, Dabić, 2021).

This conference aims to discuss the evolution, scope, and perspectives of research innovation policies in Europe. To do so, the RNI 2022 Forum on Innovation will bring together leading experts on innovation studies at national and regional level, from academia, industry, and policy makers, to discuss the factors that limit innovation, its transfer to society, and more generally the transformation of current systems and the ways Europe can scale up in terms of innovation and play a role in steering it toward societal goals. To celebrate the 50th anniversary of the presence of the Délégation générale du Québec in Brussels, round tables will be organised to compare the experiences of the EU and Quebec in the field of research and innovation.

The main topics of the conference include, but are not limited to:

- Incentives for R&D, invention, and innovation
- Technology standards and standards-setting organization
- R&D tax credits
- Intellectual property rights
- European Innovation Partnerships (EIPs)
- The emergence of innovation clusters and their diffusion throughout Europe
- Comparison of policies and achievements between the global leaders (Europe, USA, China.)
- Opportunities to achieve sustainable development through science and technology
- Transformative innovation policies vs growth-based innovation policies: in the search for complementarities
- Main missions of European innovation policy to solve grand challenges like cancer; adapting to climate change; protecting oceans and inland waters; living in climate-neutral and smart cities; and ensuring soil health and food
- Sector policy and technology development in Europe: health, agriculture and bioeconomy, environment, infrastructure and communication, energy, defense....
- Smart specialization and innovation in European regions.
- The policy-making process in Europe and the role of stakeholders







- Demand side innovation policies

References

Archibugi, D., Filippetti, A. (2018), The retreat of public research and its adverse consequences on innovation, *Technological forecasting and social change*, 127, 97-111

Audretsch, D.B., Belitski, M. (2021), Three-ring entrepreneurial university: in search of a new business model, *Studies in Higher Education*, 46.5, 977-987.

Baudry, M., Dumont, B. (2018), *Patents: Prompting or Restricting Innovation?*, London, Iste, Wiley.

Balland, P.A, Boschma, R., Crespo, J., Rigby, D.L. (2019), Smart specialization policy in the European Union: relatedness, knowledge complexity and regional diversification, *Regional Studies*, 53.9, 1252-1268

Carayannis, E. G., Campbell, D. F. J., (2017), Les systèmes d'innovation de la quadruple et de la quintuple hélice, *Innovations*, 54, 173-195.

Etzkowitz, H., Webster A., Gebhardt C., Regina B., and Terra C. (2000), The Future of the University and the University of the Future: Evolution of Ivory Tower to Entrepreneurial Paradigm, *Research Policy* 29 (2), 313–30.

Fagerberg, J. (2018), Mobilizing innovation for sustainability transitions: a comment on transformative innovation policy, *Research*. *Policy*, 47 (9), 1568-1576,

Foray, D. (2014), Smart Specialisation: Opportunties and Challenges for Regional Innovation Policies, Routledge, London.

Frenken, K.A. (2017), Complexity-theoretic perspective on innovation policy, *Complexity. Governance and Networks*, 3, 35-47

Grassano, N., Hernandez Guevara, H., Tuebke, A., Amoroso, S., Dosso, M., Georgakaki, A. and Pasimeni, F. (2020), The 2020 EU Industrial R&D Investment Scoreboard, EUR 30519 EN, Publications Office of the European Union, Luxembourg, 2020, ISBN 978-92-76-27418-6, doi:10.2760/203793, JRC123317.

Godin, B. (2019), *The invention of Technological Innovation. Languages, Discourses and Ideology in Historical Perspective*, Chentenham, Edward Elgar.

Joly, P. (2017). Beyond the Competitiveness Framework? Models of Innovation Revisited. *Journal of Innovation Economics & Management*, 22, 79-96.

Kastrinos, N, Weber, K.M. (2020), Sustainable development goals in the research and innovation policy of the European Union, *Technological Forecasting and Social Change*, 157, 120056.

Laperche, B. (2017), Enterprise knowledge capital, London, Iste, Wiley.

Leick B., Gretzinger S. (2020), Knowledge Sharing for Business Cluster and Business Network Contexts, *Journal of Innovation Economics & Management*, n° 33, 1-8.

Mazzucato, M. (2019), *Governing Missions in the European Union*, European Commission, DG for Research and Innovation doi:10.2777/014023







Robinson, D., Mazzucato, M. (2019), The evolution of mission-oriented policies: Exploring changing market creating policies in the US and European space sector, *Research Policy*, 48 (4), 936-948

Schot, J., Steinmueller, W. E. (2018), Three frames for innovation policy: R&D, systems of innovation and transformative change. *Research Policy*, 47(9), 1554-1567.

Švarc, J., Dabić, M. (2021), Transformative innovation policy or how to escape peripheral policy paradox in European research peripheral countries, *Technology and society*, 67, 101705.

Uzunidis, D. (ed.) (2020), Systemic Innovation. Entrepreneurial Strategies and Market Dynamics, London, Iste Wiley.

Uzunidis, D. (ed.) (2018), Recherche académique et innovation. La force productive de la science, Business and Innovation, Brussels, Peter Lang.

Veldhuizen C. (2020), Smart Specialisation as a transition management framework: Driving sustainability-focused regional innovation policy?, *Research Policy*, 49 (6) 103982.

Submissions

The Conference aims to attract original and relevant contributions that fully embrace scientific methods to overcome this challenge.

We invite you to submit your scientific work to the Conference on Innovation to be held at the College of Europe, Bruges (Belgium) on May 5-6, 2022.

• Submission of a presentation proposal to the conference should include:

An extended abstract of maximum 5 pages including: objectives of the paper, research question, methodology, expected results, main references – ten max)

Submission of session to the conference should include

One page on the topic of the session, name of the session' chair(s), name of proposed authors.

Each author submits his/her proposition individually and mentions the corresponding session. A session includes 4 presentations.

You can submit the paper, extended abstract or session proposal on the webpage: https://www.coleurope.eu/bruges/academic-offer/european-economic-studies/conferences-events/forum-innovation-2022

Deadlines for submissions







The conference will be held in Bruges at the College of Europe. The conference will be held on site, unless the competent authorities in the Flemish region decide on a change in sanitary measures, in which case we will go hybrid.

Please take note of these important dates:

- Deadline for paper and session submission: February 6th, 2022

- Notification of acceptance: March 7th, 2022

- Registration: March 28th, 2022

Information & Contact:

https://www.coleurope.eu/bruges/academic-offer/european-economic-studies/conferences-events/forum-innovation-2022

Scientific Committee

Daniele Archibugi (CNR, Italy), Pierre Barbaroux (Ecole de l'air, France), Patricia Baudier (EM-Normandie, France), Marc Baudry (Paris Nanterre University, France), Sophie Boutillier (Université du Littoral Côte d'Opale, France), Ron Boschma (Utrecht University, Netherlands), Vanessa Casadella (Université de Picardie Jules Verne, France), Patrick Cohendet (HEC Montréal, Canada), Elias Carayannis (University George Washington, USA), Béatrice Dumont (Université Sorbonne Paris, France), Dominique Foray (EPFL, Switzerland), Abdullah Gök (University of Strathclyde, Glasgow, UK), Koen Frenken (Utrecht Univerity, Netherlands), Pierre-Benoît Joly (Inrae, France), Blandine Laperche (Université du Littoral Côte d'Opale, France), Birgit Leick (University of South-Eastern Norway), Patrick Llerena (Université de Strasbourg, France) Mireille Matt (INRAE-Lisis, France), Laure Morel (ENSGSI, Université de Lorraine, France), Julien Pénin (Université de Strasbourg, France), Andreas Pyka (Univerity of Hohenheim, Germany), Sophie Reboud (Burgundy School of Business, France), Jean-Claude Ruano-Borbalan (CNAM, France), Douglas Robinson (CNRS-Lisis, France) Francesco Schiavone (University Parthenope, Naples, Italy), Michele Simoni (University Parthenope, Naples, Italy), Bérangère Szostak (Université de Versailles Saint Quentin en Yvelines, France), Corinne Tanguy (AgroSup Dijon, France), Leila Temri (Supagro, France), Jean-Marc Touzard (INRAE, France), Elvira Uyarra (University Manchester, UK) Dimitri Uzunidis (Université du Littoral Côte d'Opale, France).

Organization Committee

This conference is organized jointly by:

- the Research Network on Innovation (RRI) https://rri.univ-littoral.fr/
- the Délégation générale du Québec in Brussels (Québec.ca/Bruxelles)
- the College of Europe (CoE).
- and in partnership with EAEPE, Research Area [X] and [D] (https://eaepe.org/)







Local organizer: Beatrice Dumont (Université Sorbonne Paris Nord)

Sophie Boutillier (Université du Littoral Côte d'Opale), Peter Claeys (College of Europe), Blandine Laperche (Université du Littoral Côte d'Opale), André Patrocinio (Délégation générale du Québec in Brussels), Son Thi Kim Le (Université du Littoral Côte d'Opale), Vitantonio Mariella (CNR Italy), Mireille Matt (Inrae, France)