Call for Papers for a Special Issue of *Industrial and Corporate Change*

Innovation policy: new challenges, evidence and directions

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Background

Research on innovation policy has often developed to address and respond to the specific challenges that dominated the definition and intentions of innovation policy itself at the time. While much progress has been made in conceptualizing models and approaches to policy intervention to stimulate and support innovation (Freeman, 1987; Mazzucato 2018; Edler & Fagerberg 2017), the context of innovation policy has severely changed in recent years, most notably through the twin transformation towards digitalization and sustainability, major geo-political shifts, and post-pandemic quests for more resilience (Schot & Steinmueller, 2018; Rodrik, 2020, Edler et al. 2023). This evolution has broadened the ambitions of innovation policy, creating a strong need to push research on innovation policy forward and address issues around the relationship between innovation and industrial policies, their transformative potential, and, given their broadened ambition, the effects not only on the systems to which they are applied but also on the main addressees, the firms (Chang & Andreoni 2020; Aiginger & Rodrik 2020, Cimoli et al., 2009; Borrás & Edquist, 2013; Foray, 2018; Foray, 2019).

Extant research in innovation policy emphasizes a systemic view, recognizing the interplay between technology and societal change. Policies must address complex coordination failures and guide technological directionality towards societal goals (Foray, 2019). This calls for a renewed role of the state in orchestrating socio-economic transitions (Landesmann, 2015), using frameworks like invention-oriented, mission-oriented, and system-oriented policies (Edler & Fagerberg, 2017). Such strategic frameworks are informed by the non-linear dynamics of innovation systems, their path-dependent nature, and the importance of institutional interactions (David, 1975; Arthur, 1983; Edquist, 1997).

Nevertheless, analysts have almost exclusively focused on the transformative challenges and effects and on governance challenges, most notably as regards mission-oriented innovation policies or transformative innovation policies (among others see Diercks & Stewart, 2019; Haddad et al 2022). In a second strand of literature, less broad yet, scholars have had a new look at industrial policies, particularly in the context of debates on systems competition through industrial policy triggered by the Inflation Reduction Act of the US and the attempt to define strategic industrial policy in Europe (Rodrik, 2020).

Thus, there is now a gap regarding the broader implications of the new ambition and the new context of innovation policy. Old questions have new relevance, and new questions are posed by the new context. Most notably, how can micro- and macro-considerations be reconciled, how to make sure to address systemic challenges like multiple systems transformation while supporting and not distorting the market dynamics at the micro level, within and between firms? What are the effects of

mission-oriented innovation policies on the productivity of firms, and what are the sectoral effects of innovation policies that seek to ensure technology sovereignty?

Furthermore, there is a remarkable gap both in policy practice and in analysis when it comes to the creation and acceleration of markets through demand-side policy measures. In the context of the interplay of innovation, industrial and transformative policies there is a need to better understand the development of markets. Demand-side policies have a role to play that is underexplored both in the discourse on industrial policy and in innovation policy in particular. It is thus of great importance to understand the market and systems failures on the demand side and to understand better the effects of industrial and innovation policies, particularly regarding the incentives of businesses and consumers to absorb and use innovations quickly and the repercussions this has for the supply side to generate innovations (Edler 2016).

Our understanding of innovation policy is very context-dependent, both in terms of time (e.g., in relation to the digital transformation and green transition agendas) and places (regional, national, and international realities). Thus, our understanding of innovation policy and the design of specific innovation (and industrial) policy interventions continuously evolve and call for a renewal of thinking about innovation policy to identify potential fertile areas for the design and implementation of new/modern innovation policies which fit the current emerging digital industrial era as well as the pressure on governments and international organizations to deal with the ever urgent environmental and sustainability issues.

The purpose of this ICC special issue is to revisit existing theoretical models of innovation policy with a critical and contemporary eye, to understand the effectiveness of past models - whether, why, and where - and their usefulness in the current and future economic settings. This includes new conceptual frameworks, new combinations and applications of existing models and methods, and new frameworks for integrating innovation policy and other complementary public policies (e.g., industrial policy, education policy, market power regulation, and innovation and industrial policy). Case studies are also welcome.

A particular focus will be placed on research addressing new conceptual issues arising from the socio-economic post-pandemic realities, trade de-coupling between large economic powers, increased attention to firm and countries' resilience, as well as empirical evidence on the impact of recent innovation and industrial policies, to address the dual - digital and green - transformation. We invite contributions utilizing new conceptual frameworks and paradigms, methods and (combinations of) units of analysis, to initiate or contribute to new discourses and controversies in innovation policy with original and provocative research.

Possible conceptual and empirical research contributions, addressing, among others, the following issues:

- Broadened ambitions of the state - innovation, mission, transformation - and consequences for firms and markets.
- Investigating green and digital innovation policies within the context of the dual transition
- Evaluation of the effectiveness and impact of innovation policy: What is the impact on productivity and for whom? Are benefits accruing to a few selected high performers, thereby increasing the risk of additionality?
- Addressing innovation and technological unemployment: Do innovation policies need to create offsetting mechanisms and policies for reskilling and upskilling?

- Exploring complementary policies - e.g., (digital) education
- Examining the efficacy of bottom-up vs top-down and horizontal vs vertical policy initiatives
- Reevaluating the role of the State and the importance of public procurement in innovation policy
- Understanding the role of standards and regulation as a means to reduce uncertainty and provide guidance and frameworks for innovation.

Submission process and timeline

Deadline for the submission of full papers via the ICC online submission system: 31 October 2024

Paper Development Workshop after the first round of reviews: March 2025

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