

PhD in INGEGNERIA GESTIONALE / MANAGEMENT ENGINEERING - 39th cycle

PNRR 118 TDA Research Field: EXAMINING THE SOCIAL SHAPING OF SCIENTIFIC RESEARCH THROUGH ALTERNATIVE FUNDING MODELS AND DIGITAL INFRASTRUCTURES

Monthly net income of PhDscholarship (max 36 months)	
€ 1450.0	
In case of a change of the welfare rates during the three-year period, the amount could be modified.	

Motivation and objectives of the research in this field In contemporary economies, scientific research is one critical engine of economic growth (Adams 1990; Jaffe 1989; Stephan 1996). Private foundations, and the public sector have traditionally hold a key role in supporting fundamental and pre-competitive research, whose returns are deeply uncertain and have features of a public good that discourage private sector investments (Arrow 1962; Nelson 1959). However, there is widespread criticism from commentators, scientists and citizens concerning the ability of traditional scientific institutions to fulfill this mandate (Laudel 2017; Mazzucato 2015; Viner, Powell, and Green 2004; Franzoni and Stephan, 2022). One concern is that funding choices are exceedingly based on technical merit and swayed by bibliometric indicators, and not sufficiently aligned with the needs of citizens, often yielding research with limited social impact (Novitzky et al., 2020; Sampat et al., 2013; Yao et al., 2015), and discouraging experimentation and courageous ideas (Azoulay, Graff Zivin, and Manso 2012; Nicholson and loannidis 2012; OECD 2018). Another concern is that research priorities would reflect the preferences of politically and socially-dominant groups of the global north, leaving-behind sensitive topics, such as global warming, and perpetrating the disparities of disadvantaged groups, such as women and underrepresented minorities (Hoppe et al, 2019; Mancuso et al., 2023).	Cont	ext of the research activity
	Motivation and objectives of the research in this field	In contemporary economies, scientific research is one critical engine of economic growth (Adams 1990; Jaffe 1989; Stephan 1996). Private foundations, and the public sector have traditionally hold a key role in supporting fundamental and pre-competitive research, whose returns are deeply uncertain and have features of a public good that discourage private sector investments (Arrow 1962; Nelson 1959). However, there is widespread criticism from commentators, scientists and citizens concerning the ability of traditional scientific institutions to fulfill this mandate (Laudel 2017; Mazzucato 2015; Viner, Powell, and Green 2004; Franzoni and Stephan, 2022). One concern is that funding choices are exceedingly based on technical merit and swayed by bibliometric indicators, and not sufficiently aligned with the needs of citizens, often yielding research with limited social impact (Novitzky et al., 2020; Sampat et al., 2013; Yao et al., 2015), and discouraging experimentation and courageous ideas (Azoulay, Graff Zivin, and Manso 2012; Nicholson and loannidis 2012; OECD 2018). Another concern is that research priorities would reflect the preferences of politically and socially-dominant groups of the global north, leaving-behind sensitive topics, such as global warming, and perpetrating the disparities of disadvantaged groups, such as women and underrepresented minorities (Hoppe et al, 2019; Mancuso

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	At the same time, the practices and institutions of science are undergoing important changes that can profoundly reshape science, such as the emergence of digital infrastructures, that enhance long-distance collaborations, support open participation and open sharing of intermediate inputs and allow the involvement of citizens and digital crowds in the production and funding of science (Sauermann et al., 2022). Future research is needed to understanding how new funding structures and digital infrastructures are shaping the practices of scientific research and the evaluation of research outcomes together with recent calls to incorporate social outcomes and participation in the evaluation of scientific research.
Methods and techniques that will be developed and used to carry out the research	The research can be conducted using mixed qualitative and quantitative methods, such as field research (e.g., case studies, interviews, archival work), combined with statistical data analysis.
Educational objectives	This project aims at developing a broad research agenda at the intersection of economics, management, sociology, and the social studies of science and technology, useful to advance the public debate and inform future policy intervention.
Job opportunities	Private foundations, crowdfunding platforms, funding bodies.
Composition of the research group	1 Full Professors 0 Associated Professors 1 Assistant Professors 0 PhD Students
Name of the research directors	Chiara Franzoni

Contacts

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Additional support - Financial aid per PhD student per year (gross amount)	
Housing - Foreign Students	
Housing - Out-of-town residents (more than 80Km out of Milano)	2/

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(more than 80Km out of Milano)

Scholarship Increase for a period abroad		
Amount monthly	725.0 €	
By number of months	6	

National Operational Program for Research and Innovation	
Company where the candidate will attend the stage (name and brief description)	
By number of months at the company	0
Institution or company where the candidate will spend the period abroad (name and brief description)	
By number of months abroad	6

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information

The PhD student will be given a shared desk and facilities, as well as access to private databases within the Entrepreneurship Finance and Innovation lab (efi.polimi.it). S/he will have access to training opportunities of the Science for Progress Initiative of the J-PAL

(povertyactionlab.org/initiative/science-progress-initiative) and may chose to collaborate with a network of partners and coinvestigators based in Denmark, Germany, Sweden and the US. Teaching assistantship opportunities are possible in both master and bachelor-level courses.