

CONTACT INFORMATION	CEMFI Casado del Alisal 5 28014 Madrid, Spain	Placement Directors: Prof. Nezih Guner Prof. Dante Amengual	Mobile: +34 6 43 90 15 12 sophie.nottmeyer@cemfi.edu.es www.sophienottmeyer.github.io
RESEARCH INTERESTS	Development Economics, Spatial Economics, Applied Microeconomics		
EDUCATION	CEMFI Ph.D. in Economics 2025 Dissertation: “ <i>Essays on Economic Development and Productivity Across Space</i> ” Visiting Ph.D. Student, Yale University, hosted by Prof. Mushfiq Mobarak 2023 Sciences Po, Paris 1 Panthéon-Sorbonne & Universitat Autònoma de Barcelona Master in Economics and Quantitative Economics (<i>double degree</i>) 2018 University of Tübingen B.Sc. in International Economics and European Studies 2015 Visiting Student, University of Guadalajara (Mexico) 2014		
REFERENCES	Prof. Diego Puga CEMFI diego.puga@cemfi.es	Prof. Paula Bustos Universitat Pompeu Fabra paula.bustos@upf.edu	Prof. Monica Martinez-Bravo CEMFI (<i>on leave</i>) monica.martinezbravo@gmail.com
RESEARCH	Job Market Paper “Trac(k)tors of Change: Monitoring, Tractor Mobility and Agricultural Mechanization in Kenya” <i>Abstract:</i> Private rental markets can help small-scale producers in developing countries overcome capital indivisibilities and adopt productive technologies, yet they remain limited in scope. This paper studies the role of monitoring problems on the supply side of tractor rental markets in Kenya, where moral hazard between tractor owners and operators discourages owners from sending tractors to remote areas, limiting the efficient spatial allocation of scarce capital and, thus, access to mechanization. To study this mechanism, I evaluate the impact of a new GPS tracking app that allows owners to monitor their operators remotely, combining unique tractor GPS data from around 1,200 tractors and 900,000 georeferenced fields, satellite data and an original farmer survey with a quantitative spatial model. After adoption, monitored tractors gradually expand their range of operations and reallocate toward areas where potential returns to mechanization are higher, consistent with a reduction in the monitoring cost and a more efficient spatial allocation. Further, fields visited by monitored tractors experience larger increases in remotely-sensed vegetation growth than similar nearby fields, suggesting productivity gains at destination. Finally, I develop and estimate a quantitative spatial model of tractor location choice that incorporates monitoring cost to quantify the aggregate gains from the technology. The results indicate that digital monitoring raises output by 2%, reducing spatial misallocation by 15%, and is more cost-effective than an equivalent subsidy.		
	Work In Progress “Informality and the City Size Wage Premium: Evidence from Brazil” “Milky Way: Market Structure and Behavior of Informal Milk Traders” (with Guanghong Xu and Martin Nandelenga) “Ethnic Diversity and Technology Choice in Manufacturing”		

Other Publications

“Advancing Corn Yield Mapping in Kenya Through Transfer Learning”
(with Ahaan Bohra, Chenchen Ren, Shuo Chen and Yuchi Ma)
Remote Sensing, 17(10), 1717.

Experience

	Research Assistant to Prof. Monica Martinez-Bravo, CEMFI	2022-2023
	Research Assistant to Prof. Paula Bustos, CEMFI	2020-2021
	Pre-doc Research Assistant to Prof. Francis Kramarz, CREST	2018-2019
	Research Assistant, Institute for Applied Economic Research (IAW) Tübingen	2014-2015
FELLOWSHIPS, AWARDS & GRANTS	The Weiss Fund PhD Research Grant (PI, \$17,500)	2023
	STEG Small Research Grant (PI, ~\$34,000)	
	María de Maeztu PhD Exploration Grant, CEMFI (PI, ~\$1,800)	
	PEDL Exploratory Research Grant (Co-PI, ~\$8,800)	2022
	STEG PhD Research Grant (PI, ~\$4,700)	
	PhD Fellowship (FPI), Spanish State Research Agency (AEI)	2021
	María de Maeztu PhD Track Excellence Scholarship, CEMFI	2019
TEACHING	Graduate	
	<i>Quantitative Spatial Models</i> , CEMFI Summer School	2024
	Teaching Assistant to Prof. Nick Tsivanidis (UC Berkeley)	
	<i>Development Economics</i> , CEMFI	2024, 2023
	Teaching Assistant to Prof. Monica Martinez-Bravo	
	<i>Urban Economics</i> , CEMFI	2022
	Teaching Assistant to Prof. Diego Puga	
	Undergraduate	
	<i>Big Data: Applications to Spatial Data</i> , CEMFI Summer Internship Program	2022
	Instructor	
	<i>Mathematics for Economists</i> , University of Tübingen	2012
	Teaching Assistant to Prof. Thomas Dimpfl	
PRESENTATIONS	CEPR Paris Symposium PhD Poster Sessions (<i>scheduled</i>)	2025
	NEUDC (Tufts University) (<i>scheduled</i>)	
	Firms, Labor Markets, and Development Workshop (University of Bari)	
	Universitat Pompeu Fabra (Internal Applied Lunch Seminar)	
	Universitat Pompeu Fabra (CREI International Lunch Workshop)	2024
	Yale University (Development Lunch),	2023
	CAGE Summer School (University of Warwick)	
	PEDL Young Scholars Matchmaking Workshop (NYU Abu Dhabi)	2022
SERVICE	Co-Organizer, Applied Micro PhD Workshop, CEMFI	2022-2023
	Mentor, Graduate Applications International Network (GAIN)	
	Mentor, Women in Economics (WiE) Initiative	2021
OTHER PROFESSIONAL EXPERIENCE	Evaluation Unit Intern, Development Co-operation Directorate, <i>OECD</i> , Paris	2017
	M&E Junior Consultant, <i>German Technical Cooperation Agency (GIZ)</i> , Rwanda	2016
	Intern, Promotion of the Economy and Employment, <i>GIZ</i> , Rwanda	
	Economic Division Associate, <i>Permanent Mission of Germany to the UN</i> , Geneva	2015
ADDITIONAL INFORMATION	<i>Programming</i> : Stata, Python, QGIS, Matlab, R <i>Languages</i> : German (native), English (fluent), Spanish (fluent), French (advanced)	