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Education	University of California, Santa Cruz Ph.D. Economics, 2025 (expected) Indira Gandhi Institute of Development Research, Mumbai, India M.S. Economics, 2015 Miranda House, University of Delhi B.A. Economics, Honors, 2013
Fields	Macro-Finance Climate Economics
References	Dr. Galina Hale gbhale@ucsc.edu Dr. Grace Weishi Gu grace.gu@ucsc.edu Dr. Brenda Samaniego de la Parra bsamanie@ucsc.edu Dr. Alonso Villacorta avillaco@ucsc.edu
Research and Professional Experience	Short-Term Consultant, World Bank, 2024 Thomas J. Sargent Dissertation Fellow, Federal Reserve Bank of San Francisco, 2023 Ph.D. Intern, Federal Reserve Bank of New York, 2023 CSWEP Dissertation Fellow, Board of Governors of The Federal Reserve, 2022 Graduate Student Researcher, UCSC, 2020 – 2024 Research Fellow, National Institute of Public Finance and Policy, New Delhi, 2017 - 2019 Experienced Associate, PricewaterhouseCoopers - U.S. (Advisory), 2015 - 2016 Graduate Intern, Department of Economic and Policy Research, Reserve Bank of India, 2014 Research Fellow, Innovation Project Scheme, University of Delhi, 2012 - 2013 Undergraduate Intern, Reserve Bank of India, Chandigarh, 2012
Working Papers	Information about climate transition risk and bank lending (Job Market Paper) I provide novel empirical evidence showing the role of specialized banks in pricing climate transition risk. This role varies across geographies and different aspects of transition risk. Moreover, bank specialization does not necessarily translate into higher lending rates for negatively exposed firms after an oil supply news shock. I explain the role of bank specialization as a source of heterogeneity in costs of private information acquisition through a theoretical model of costly screening in a competitive bank lending structure. I allow for non-Bayesian belief updates by the banks about the borrowers' exposure to transition risk. Optimal private information acquisition steeply increases when banks under-react more in response to public information. Conditional on the signals from screening, the interest rate differential between more and less exposed borrowers is smaller when banks under-react more to public information. This effect becomes stronger as the average borrower quality decreases. These results imply that even with high-quality public information and communication about decarbonization, lowering the cost of acquiring information about firms' climate change exposures through standardized firm-level disclosures and comprehensive climate-stress testing guidelines for banks is important for reducing financing costs for greener firms. How Much is a Formal Job Worth? Evidence from Mexico (with Dr. Brenda Samaniego de la Parra) Can informality be explained by labor market frictions or by the preferences of workers? The answer and its welfare implications are intrinsically related to the value that households place on the characteristics and benefits that accompany a formal job, net of the costs that employers incur to formalize their workers. Using a new employer-employee-household matched panel dataset that includes both formal and informal workers and exploiting variation in formal sector employment resulting from over 600,000 work-site inspections in Mexico, we estimate the distribution of the value of formal jobs. Work-site inspections result in a transition into the formal sector for many previously informal workers, which we use to estimate the effect of formality on household labor supply. The monetary value of a formal job, which derives from social benefits only eligible to formal sector workers, can then be inferred using a model of household labor supply. Contrary to the previous literature, we find that low income households have a high valuation for formal jobs.

However, due to regressive labor taxation, the value of formality net-of-taxes is negative for households in the bottom decile of the wage distribution.

Papers in Progress

Large disasters and changes in climate risk perceptions: Evidence from the United States

This paper examines the nature of belief updates about individuals' exposure to damages from climate change. I use county-level survey data on beliefs related to potential damages from climate risk and evaluate how the survey responses change at the county level after a 'billion-dollar' disaster in the state. Controlling for county demographics, income, educational attainment levels, political affiliation, and long-term temperature and precipitation anomalies, I find evidence for prior conformity. In counties with a high average risk perception, a state-level large disaster is associated with a higher risk perception. However, the post-disaster beliefs are still strongly anchored to those recorded a decade before the disaster occurred. The relevance of large disasters in subjective expectation formation is further indicated by the evidence that monetary damages from crop and property loss are not strongly associated with belief updates. These results highlight the information channels that individuals pay attention to while forming expectations about climate change, which has important implications for household adaptation to climate risks.

How climate-awake are financial markets? (with Galina Hale and Anirban Sanyal)

Climate risks are now acknowledged by policymakers, financial market practitioners, and academics as a potentially material threat to financial markets and financial stability. As physical manifestations of climate change become more apparent, shall we expect massive asset repricing and financial destabilization? The answer to this question crucially depends on whether climate risks are properly priced-in already in different asset classes. Climate-related events are unique in that they are drawn from a distribution that shifts and becomes more disperse over time, making belief formation a crucial component of asset pricing. We simulate the response of asset prices to climate disasters using the rare events asset pricing framework based on Gabaix (2012) to quantify "fully priced in" response in various structures of subjective belief formation. We survey the empirical literature on the pricing of physical climate risk in equity and fixed income markets to evaluate whether the estimates imply fully priced-in response across different belief formation structures.

Disaster rebuilding costs and climate adaptation and mitigation: Are we building back better? (with Galina Hale and Ted Liu)

This project determines the effect of financial constraints on household resilience and adaptation to climate change. Using county-level data on disaster declarations, factors affecting household preparedness, household income, and financial distress information, along with agency data on ex-ante and ex-post disaster mitigation and assistance programs, we focus on both the information channel (i.e., the lack of availability of relevant information) and financial constraints channel for vulnerable households, and how policies overlooking these challenges might increase adaptation inequity.

Currency Risk and Global Banks (with Grace Weishi Gu and Isha Agarwal)

Climate Risks and Credit Allocation (with Galina Hale, Grace Weishi Gu, and Jinhong Wu)

Political Misallocation of Electricity in India (with Meera Mahadevan and Ajay Shenoy)

Publications

God is in the Rain: The Impact of Rainfall-Induced Early Social Distancing on Covid-19 Outbreaks (with Dr. Ajay Shenoy, Guanghong Xu, Rolly Kapoor, Haedong Rho, and Kinpritma Sangha), *Journal of Health Economics*, 2021.

Government Expenditure in India: Composition and Multipliers (with Dr. Ashima Goyal), *Journal of Quantitative Economics* (Springer Publications), 2018

Grants, Fellowships and Awards	<p>Coastal Climate Resilience Pilot Funding Grant (PI - Dr. Galina Hale; Co-investigator - Ted Liu), UCSC, 2023</p> <p>Milam-McGinty-Kaun Teaching Excellence Award, UCSC, 2023</p> <p>Graduate Division Fall Travel Grant, UCSC, 2023</p> <p>Economics Department Travel Grant, UCSC, 2023</p> <p>Hammett Fellowship, Environmental Sciences Department, UCSC, 2022</p> <p>Graduate Student Grant, Dolores Huerta Research Center for the Americas, UCSC, 2022</p> <p>Dissertation Research Grant, Economics Department, UCSC, 2022</p> <p>TA Quarterly Award, Economics Department, UCSC, 2022</p> <p>Regents Fellowship, Department of Economics, UCSC, 2019</p> <p>The President's Gold Medal for highest CGPA in M.S. Economics, IGIDR, 2015</p> <p>Smt. Mallan Devi Bhalla Award for Best Student in First Year Economics, Miranda House (University of Delhi), 2011</p>
Seminars and Conferences	<p>2025: IBEFA-ASSA Meeting, San Francisco</p> <p>2024: ASSA meeting, San Antonio; Macroeconomics Workshop, UCSC; UCSC CAFIN Financial Market Solutions for Funding Green Transition and Climate Resilience Conference; NYU NY Fed Climate Finance Conference Poster Session; IBEFA Summer Meeting, Seattle; NAS Workshop on Macroeconomic Implications of Decarbonization Poster Session; 4th FINPRO Conference</p> <p>2023: IPWSD, Columbia University; Federal Reserve Bank of New York; Federal Reserve Bank of San Francisco; Western Economics Association International Annual Conference, San Diego; Southern Economics Association, New Orleans; Macroeconomics Workshop, UCSC</p> <p>2022: Board of Governors of The Federal Reserve, Washington D.C.; LACEA-LAMES, Lima; Macroeconomics Workshop, UCSC; NBER Behavioral Macroeconomics Bootcamp (Participant)</p> <p>2020: Discussant, Emerging Markets Finance Conference</p> <p>2015: Tenth Annual International Conference on Public Policy and Management, Indian Institute of Management, Bangalore</p>
Teaching	<p>Instructor</p> <p>Econ 294 A (M.S. R Programming), UCSC, 2023; 2024</p> <p>Programming in R for MSQE students, ISI (Delhi), 2018</p> <p>Teaching Assistant</p> <p>M.S. APEF Capstone TA, UCSC, 2024</p> <p>Econ 1 (Introductory Microeconomics), UCSC, 2024</p> <p>Econ 233 (M.S. Finance), UCSC, 2021; 2022</p> <p>Econ 202 (M.S. Macroeconomics), UCSC, 2022</p> <p>Econ 131 (International Financial Management), UCSC, 2021; 2022</p> <p>Econ 149 (Economies of East and South-East Asia), UCSC, 2021</p> <p>Econ 113 (Introductory Econometrics), UCSC, 2020</p> <p>COWL 52 (Personal Finance), UCSC, 2020; 2021</p> <p>Econ 197 (Economic Rhetoric), UCSC, 2020</p> <p>Econ 2 (Introductory Macroeconomics), UCSC, 2020</p>
Academic Service	<p>Referee: AER Insights, Macroeconomics and Finance in Emerging Market Economies</p>
University and Public Service	<p>Science Internship Program, Mentor, UCSC, 2024</p> <p>Grad School Mentor for Undergraduate Students, GradPath, UCSC, 2023</p> <p>Graduate Student Representative, Strategic Planning Committee on Climate Change, UCSC, 2022</p> <p>Wildfire Shelter Volunteer, Volunteer Center of Santa Cruz County, Aug 2020</p> <p>Contributor, Punjab Working Group Report, 2020</p> <p>Weekend Primary and College Education Volunteer, Udaan India Foundation, 2015 - 2016</p>
Languages	<p>English (Fluent), Hindi (Native), German (Beginner)</p>
Software skills	<p>R, Matlab, Stata, Python</p>