Nina Caroline Buchmann

PERSONAL DETAILS

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ACADEMIC POSITIONS

Assistant Professor of Economics, UC Berkeley 2026 –
Postdoctoral Research Associate, Princeton University 2024 – 2025
Cowles and Economic Growth Center Postdoctoral Fellow, Yale University 2025 – 2026

EDUCATION

Ph.D. in Economics, Stanford University 2024
M.A. in International and Development Economics, Yale University 2015
A.B. in Economics (*Phi Beta Kappa*), Harvard University 2013

RESEARCH FIELDS

Development Economics, Behavioral & Experimental Economics, Gender

JOB MARKET PAPER

Paternalistic Discrimination with Carl Meyer and Colin Sullivan

We combine two field experiments in Bangladesh with a structural labor model to define and test for *paternalistic discrimination*, the differential treatment of two groups to protect one group—even against its will—from harmful or unpleasant situations. We observe real hiring and application decisions for a night-shift job that provides safe worker transport home at the end of the shift. In the first experiment, we vary employers' perceptions of job costs to female workers by experimentally varying information about the transport but holding taste-based and statistical discrimination constant. Not informing employers about the transport decreases demand for female labor by 22%. However, employers respond significantly less to a cash payment to female workers that would allow them to purchase safe transport themselves. This suggests that employers paternalistically prevent women from making their own choices. In the second experiment, not informing applicants about the transport reduces female labor supply by 15%. In structural simulations that combine the results of both experiments, eliminating paternalistic discrimination reduces the gender employment gap by 24% and increases female wages by 21%.

PUBLISHED PAPERS

A Signal to End Child Marriage: Theory and Experimental Evidence from Bangladesh
with Erica Field, Rachel Glennerster, Shahana Nazneen, and Xiao Yu Wang
American Economic Review, 2023

Child marriage remains common even where female schooling and employment opportunities have grown. We experimentally evaluate a financial incentive to delay marriage alongside a girls' empowerment program in Bangladesh. While girls eligible for two years of incentive are 19 percent less likely to marry underage, the empowerment program failed to decrease adolescent marriage. We show that these results are consistent with a signaling model in which bride type is imperfectly observed but preferred types (socially conservative girls) have lower returns to delaying marriage. Consistent with our theoretical prediction, we observe substantial spillovers of the incentive on untreated nonpreferred types.

WORKING PAPERS

The Good Wife? Reputation Dynamics and Financial Decision-Making Inside the Household with Pascaline Dupas and Roberta Ziparo

Revision Requested, American Economic Review

We study reputation dynamics within the household in a setting where women regularly receive transfers from their husbands for household purchases. We propose a signaling model in which wives try to maintain a good reputation in the eyes of their husbands to receive high transfers. This leads them to (a) avoid risky purchases (goods with unknown returns); and (b) knowingly over-use low-return goods to hide bad purchase decisions—we call this the *intra-household sunk cost effect*. We present supportive evidence for the model from a series of experiments with married couples in rural Malawi.

The Lifesaving Benefits of Water Infrastructure: Quantifying the Mortality Impact of Abandoning Shallow Tubewells in Bangladesh with Erica Field, Rachel Glennerster, and Reshmaan Hussam

We document the consequences of a public health campaign that led to the sudden abandonment of local water infrastructure by one-fifth of Bangladesh's population. Households who experienced quasi-randomly distributed arsenic contamination, and thus were likely to abandon their shallow tubewells, saw 28% greater child and 47% greater elderly mortality post-campaign than those not motivated to shift. Verbal autopsy data reveal that the sudden mortality increases are driven by diarrheal disease. Mortality changes depend on the distance to alternative clean water infrastructure: those with an (arsenic and pathogen-free) deep tubewell within 300 meters of their home experience no increase in mortality, but mortality rises as households are forced to walk further for arsenic-free water. Our results quantify the mortality benefits of water infrastructure and underscore the importance of physical proximity to pathogen-free water sources.

The Effects of Large Group Meetings on the Spread of COVID-19: The Case of Trump Rallies with Doug Bernheim, Zach Freitas-Groff, Sebastián Otero

We investigate the effects of large group meetings on the spread of COVID-19 by studying the impact of eighteen Trump campaign rallies. To capture the effects of subsequent contagion within the pertinent communities, our analysis encompasses up to ten post-rally weeks for each event. Our method is based on a collection of regression models, one for each event, that capture the relationships between post-event outcomes and pre-event characteristics, including demographics and the trajectory of COVID-19 cases, in similar counties. We explore a total of 24 procedures for identifying sets of matched counties. For the vast majority of these variants, our estimate of the average treatment effect across the eighteen events implies that they increased subsequent confirmed cases of COVID-19 by more than 250 per 100,000 residents. Extrapolating this figure to the entire sample, we conclude that these eighteen rallies ultimately resulted in more than 30,000 incremental confirmed cases of COVID-19. Applying county-specific post-event death rates, we conclude that the rallies likely led to more than 700 deaths (not necessarily among attendees).

Power vs. Money: Alternative Approaches to Reducing Child Marriage in Bangladesh, a Randomized Control Trial with Erica Field, Rachel Glennerster, Shahana Nazneen, Iman Sen, and Svetlana Pimkina

A clustered randomized trial in Bangladesh examines alternative strategies to reduce child marriage and teenage childbearing and increase girls' education. From 2008, girls in treatment communities received either i) a six-month empowerment program, ii) a financial incentive to delay marriage, or iii) empowerment plus incentive. Data from 4.5 years after program completion show that girls eligible for the incentive for at least two years were 24% less likely to be married under 18, 15% less likely to have given birth under 20, and 25% more likely to be in school at age 22. Girls eligible for the empowerment program were 11% more likely to be in-school and saw an increase in an income-generating activities index of 0.5SDs.

Cost-Benefit Analysis of Strategies to Reduce Child Marriage in Bangladesh with Erica Field, Rachel Glennerster, and Kyle Murphy

Bangladesh suffers from the fourth highest rate of early female marriage in the world, which has remained very high despite large-scale efforts to combat the problem. As marriage and education are closely linked in many contexts, we calculate the education benefits of delayed marriage. We perform comprehensive comparative cost-benefit analyses of six interventions from South Asia, Latin America, and Sub Saharan Africa which have demonstrated significant impacts on marriage age and/or early marriage. We estimate the educational benefits by converting delayed marriage effects into additional schooling using a conversion factor from Bangladesh. We find that a program which provides girls with financial incentives conditional on marriage status is the most cost-effective way to avert child marriages and has the highest benefit-cost ratio and net present value per $1,000 spent.

The Marriage Market Value of Bride Age and Education: A Vignette Approach to Decomposing Marriage Transfers in Rural Bangladesh with Erica Field and Rachel Glennerster

Data from a carefully crafted hypothetical survey of 750 professional matchmakers in rural Bangladesh enable a novel analysis of how demographic characteristics of brides and grooms, including wealth, education and age, influence marriage market prices (dowry and denmeher). While a standard Hedonic approach to decomposing marriage market prices is likely to be biased by selection on unobservables, hypothetical price questions circumvent this issue by varying key demographic features of the bride while holding constant all other characteristics of both spouses. This is akin to a stated preference approach to demand elicitation, but because we survey third-party negotiators rather than potential buyers, our approach is less prone to standard concerns of bias in stated preference techniques. Analysis of survey responses reveals education, labor market participation, and youth are valued in the marriage market and that parents of educated, working, and young brides can negotiate a higher denmeher/dowry ratio. These findings are in contrast to observational data which finds no consistent return to education or labor market participation.

SELECTED WORK IN PROGRESS	**The Economics of Domestic Violence - Evidence from Bangladesh**
	Intimate Partner Violence and the Emergence of Social Norms - A Randomized Control Trial with Paula Lopez Pena, Sakib Mahmood and Atonu Rabbani
	Champions of Change - Changing Gender Attitudes and Behaviors through Social Targeting with Yasmine Bekkouche, Sarah Deschênes, and Rozenn Hotte
	Know Your Place - Employment Decisions Among Couples with Adrian Blattner, Pascaline Dupas, and Muriel Niederle
	Long-Term Impacts of Adolescent Girls' Empowerment Programs in Bangladesh with Erica Field and Rachel Glennerster

RESEARCH GRANTS

Total grant funding: \$3,732,625; out of which as one of primary PIs: \$3,057,752

Paternalistic Discrimination: $G^2LM|LIC$, National Science Foundation, Stanford King Center on Global Development, International Growth Centre, CEGA PEP Funding, Weiss Fund for Research in Development Economics, Structural Transformation and Economic Growth, George P. Shultz Research Fellowship

A Media Experiment to Reduce Intimate Partner Violence in Bangladesh: Agency Fund, USAID Development Innovation Ventures, Fund For Innovation in Development, International Growth Centre, Grand Challenges Canada Stars in Sexual and Reproductive Health and Rights, SVRI World Bank Group Development Marketplace Award for Innovation on Gender-Based Violence Prevention and Response, Stanford Center on Global Poverty and Development Graduate Student Research Funding

The Economics of Domestic Violence: CEGA PEP Funding, Graduate Research Opportunity Funding, George P. Shultz Research Fellowship, Stanford King Center on Global Development Graduate Student Research Funding, Weiss Fund for Research in Development Economics, National Science Foundation

Champions of Change - Changing Gender Attitudes and Behaviors through Social Targeting: Fund For Innovation in Development

Long-Term Impacts of Adolescent Girls' Empowerment Interventions in Bangladesh: $G^2LM|LIC$, J-PAL Learning For All Initiative

Awards & Fellowships	Claire and Ralph Landau Prize for the best student SIEPR discussion paper	2024
	Daniel Cohen Award	2024
	China Star Tour	2024
	REStud Tour	2024
	King Center Graduate Student Fellowship	2023 – 2024
	SIEPR Graduate Student Fellowship	2023 – 2024
	NBER Gender in the Economy Pre-Doctoral Fellowship	2021 – 2022
	Women in Asia Fellowship	2020
	Sean Buckley Memorial Award for the Best 2nd Year Paper	2019
	German National Merit Foundation Scholar	2014 – 2016
	Recipient of Germany's ERP Scholarship	2014
	Recipient of the Haniel Scholarship for Economics (not taken)	2014
	Phi Beta Kappa, Alpha Iota Chapter of Massachusetts	2013
	Harvard College Scholar for Superior Academic Achievement	2010

Relevant Positions	**Duke Development Lab**	2015 – 2017
	Research Fellow	
	United Nations, Debt and Development Finance Branch (UNCTAD)	2014 – 2015
	Survey Data Analyst	
	European Central Bank	2013 – 2014
	Trainee in the International Policy Analysis Group	

Teaching Experience	**Department of Economics, Stanford University**	
	Teaching Assistant for Marcelo Clerici-Arias, Bing Honors College	2021, 2022
	Teaching Assistant for Marcelo Clerici-Arias, Junior Economics Honors Course	2021
	Graduate School of Business, Stanford University	
	Teaching Assistant for Kathryn Shaw and Giovanna Prennushi, Economic Growth	2020

Refereeing

Econometrica, Quarterly Journal of Economics, American Economic Review, American Economic Review: Insights, The Review of Economics and Statistics, American Economic Journal: Applied Economics, American Economic Journal: Economic Policy, Journal of Economic Behavior and Organization, Journal of Development Economics, Journal of the European Economic Association, World Bank Economic Review, Economic Development and Cultural Change, Labor Economics, Economic Modeling, World Development, Fund for Innovation in Development, World Bank Research, Global Innovation Fund, USAID DIV

Professional Activities	Student Member, Culture Committee, Stanford University, Economics Dept.	2020 – 2021
	Founder and Co-President, WE RISE Student Association, Stanford University	2019 – 2021
	Young African Research Network Mentor, Stanford University	2022
	Pre-Doc Mentor, King Center on Global Development, Stanford University	2021 – 2022

Presentations	USC Economics, USC Marshall, Yale Economics, Yale SOM, Princeton Economics, Chicago Economics, Chicago Booth, Harvard Economics, UCLA, UC Berkeley, IOG, Columbia, Northwestern Rookiefest, Warwick, ECB, Tor Vergata, Beijing University, Fudan University	2024
	BRAC Institute of Governance and Development, IGC Resilient and Resurgent Bangladesh Conference, SITE Psychology and Economics, SITE Gender, University of San Francisco, Goethe University Frankfurt, ESA, Stanford GBV	2023
	CEMFI, American University, ECBE, ESA	2022
	BYEM (Best Paper Award), YES, ADE, University of Ohio, ESA, SITE Experimental	2021
	Workshop on the Political Economy of Conflict and Crime	2020
	UEA Lab-in-the-field Conference, SEEDEC, CIES	2019
	Post-Primary Education Initiative Donor-Researcher Convening	2017