Nathan Barker

Address: Department of Economics

Yale University

New Haven, CT 06520-8268

Telephone: +1 360-907-4993

E-mail: nathan.barker@yale.edu

Web page: www.nathan-barker.com

Citizenship: USA

Fields of Concentration:

Primary Field: Development Economics

Secondary Fields: Public Economics, Labor Economics

Desired Teaching:

Development Economics Public Economics Labor Economics Microeconomics

Comprehensive Examinations Completed:

2018 (Oral): Development, Public Finance (with distinction)

2017 (Written): Microeconomics, Macroeconomics

Dissertation Title: Essays on the Microeconomics of Structural Transformation in Ghana

Committee:

Professor Mark Rosenzweig (Co-Chair) Professor Christopher Udry (Co-Chair) Professor Ahmed Mushfiq Mobarak

Professor Dean Karlan

Expected Completion Date: May 2022

Degrees:

Ph.D., Economics, Yale University, 2022 (expected)

M.Phil., Economics, Yale University, 2019 M.A., Economics, Yale University, 2019

BSFS, International Economics (magna cum laude), Georgetown University, 2012

Fellowships, Honors and Awards:

Ryoichi Sasakawa Young Leaders Fellowship Fund, 2018-19; 2020-21

Research Grants:

MacMillan Center for International Studies, 2019, Pre-Dissertation Fellowship, Yale University

National Science Foundation, 2017, "Escaping Poverty: Cognitive Behavioral Therapy and Social Protection," with Dean Karlan, Gharad Bryan, Angela Ofori-Atta and Christopher Udry

Teaching Experience:

Fall 2020, Teaching Assistant to Prof. Steve Berry, Introductory Microeconomics, Yale College

Winter 2019, Teaching Assistant to Prof. Dean Karlan, Effective Philanthropy, Kellogg School of Management

Research and Work Experience:

Research Assistant, Economic Growth Center, New Haven, CT, Spring 2020

Research Coordinator, Dean Karlan and Christopher Udry, Innovations for Poverty Action, Tamale, Ghana, 2015-2016

Research Assistant, Dean Karlan, Innovations for Poverty Action, New Haven, 2013-2015 (fieldwork in Mek'ele, Ethiopia, Aug-Sep 2013, Oshakati, Namibia, Sep-Nov 2014) Princeton in Africa Fellow, The BOMA Project, Nanyuki, Kenya, June 2012-13

Working Papers:

"The Effects of Female Land Inheritance on Economic Productivity in Ghana," *Job Market Paper*

"Mental Health Therapy as a Core Strategy for Improving Human Capital: Evidence from Ghana" with Gharad Bryan, Dean Karlan, Angela Ofori-Atta and Christopher Udry, (October 2021), *NBER Working Paper No.* 29407.

"Migration and the Labour Market Impacts of COVID-19" with C Austin Davis, Paula López-Peña, Harrison Mitchell, A Mushfiq Mobarak, Karim Naguib, Maira Emy Reimão, Ashish Shenoy, Corey Vernot, (July 2020), WIDER Working Paper No. 2020/139

Work In Progress:

"The Gendered Impacts of Rural Electrification in Ghana"

"Relaxing Seasonal Liquidity Constraints in Northern Ghana" with Abhijit Banerjee, Dean Karlan, Robert Osei, Isaac Osei-Akoto, Christopher Udry Fieldwork Complete

"Mental Health and Economic Constraints" with Gharad Bryan, Dean Karlan, Angela Ofori-Atta, Christopher Udry

Fieldwork Complete

"The Fading Long-Run Impacts of a Multifaceted Economic Program in Ghana and Ethiopia", with Abhijit Banerjee, Dean Karlan, Robert Osei, Isaac Osei-Akoto, Christopher Udry and Kelsey Wright Fieldwork Complete

Seminar and Conference Presentations:

Trinity College Dublin, Dec 2020

Referee Service:

American Economic Journal: Economic Policy

Languages:

English (native), Spanish (advanced), Swahili (basic)

References:

Prof. Mark Rosenzweig Yale University Department of Economics New Haven, CT 06520 PO Box 208269 Phone: 203-432-3588 mark.rosenzweig@yale.edu

Prof. Christopher Udry Northwestern University Department of Economics 2211 Campus Drive Evanston, IL 60208 Phone: 847-491-8216

christopher.udry@northwestern.edu

Prof. Dean Karlan Northwestern University Kellogg School of Management 2211 Campus Drive Evanston, IL 60208 Phone: 847-491-8706 karlan@northwestern.edu

Prof. Ahmed Mushfiq Mobarak Yale University Department of Economics New Haven, CT 06520 PO Box 208269 Phone: 203-435-0186

ahmed.mobarak@yale.edu

Dissertation Abstract

The Effects of Female Land Inheritance on Economic Productivity in Ghana [Job Market Paper]

I study how female land inheritance affects the allocation of male and female labor in Ghana, and the labor productivity and gender equity consequences of this allocation. The existing gap in male and female inheritance is a major source of global gender inequality. An estimated 41% of the world's Low and Lower Middle Income labor force is engaged in agriculture; in these countries more than 80% of landowners are men. The productivity impacts of this gender inequity are not clear however, given research suggesting that *exiting* agriculture is a key route to income growth.

I test this question by considering differences in inheritance customs across ethnic groups in Ghana. Among the 52% of the population practicing *patrilineal* descent, land passes from fathers to sons; women are unlikely to receive or manage land. In contrast, the more flexible inheritance rules for the 48% of individuals practicing *matrilineal* descent allows for both male and female inheritance. These inheritance differences lead to an increase in matrilineal women managing farms and supplying their labor in agriculture. Their inheritance induces men to exit agriculture and work for a wage. This improves male labor productivity and produces higher per capita consumption. In contrast, because women face additional barriers to participating in the labor market, male inheritance under patrilineal inheritance is associated with women supplying labor to male-owned plots, and supplying less labor in total.

To quantify the productivity consequences of these differences, I examine how gender, inheritance system and cognitive skill jointly shape the selection of individuals into occupations. To do so, I first estimate a model of farmer total factor productivity (TFP) with endogenous input choice, and model selection into occupation as a function of gender, descent, cognition and education. I find that (selection-adjusted) cognitive skill is rewarded in the labor market, but not in agriculture; I also estimate a non-agriculture premium relative to farming for most levels of land ownership. Thus, matrilineal men have higher labor productivity through two mechanisms: those with higher cognition are more likely to be employed in a sector where their skill is rewarded; they also experience a level effect increase via participation in non-farm activities. In contrast, I find no net effect of matriliny on agricultural productivity, driven by three offsetting effects: (1) women have lower farm TFP than men, and (2) more women are farm managers under matriliny, but (3) this male-female TFP gap is attenuated in matriliny. The non-agricultural benefits under matriliny are therefore not offset by reduced farm productivity.

In addition to matrilineal households having higher per capita consumption, I find that matrilineal women have higher bargaining power. Matrilineal women report greater autonomy over decisions in the household, and a greater share of household expenditure is spent on children's schooling in matrilineal households. My results suggest productivity and gender equity benefits associated with increased flexibility in land inheritance customs in contexts with further barriers to female employment, and existent non-farm opportunities.

Mental Health Therapy as a Core Strategy for Improving Human Capital: Evidence from Ghana, with Gharad Bryan, Dean Karlan, Angela Ofori-Atta and Christopher Udry

We study the impact of group-based Cognitive Behavioral Therapy (CBT) in a randomized evaluation among a general low-income population in rural Ghana. Results from 2-3 months after the completion of the program show strong impacts on mental and physical health, cognitive and socioemotional skills, and downstream economic outcomes. We do not find evidence of heterogeneous treatment effects by baseline psychological distress, which we attribute to two distinct channels. First, individuals in our sample, including those classified as well at baseline, are *vulnerable* to subsequent lapses into psychological distress by virtue of their low incomes. CBT is effective at preemptively inoculating against these lapses. In support of this hypothesis, when using our control group data to predict endline psychological distress using least absolute shrinkage and selection operator (LASSO) regressions, we find that while treatment effects are not concentrated among those with baseline distress, they are greatest among individuals with greatest *predicted endline distress*. Second, the treatment effects we observe for socioemotional and cognitive skills do not show any evidence of heterogeneity by baseline or predicted endline skills, which we interpret as evidence that CBT provides a general set of tools to strengthen socioemotional and cognitive skills, even for those with no mental health difficulties.