RESEARCH ON TAP

Human Capital and Global Development

October 29, 2019

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Migration, Diversity, and Nation Building in a Global World

Samuel Bazzi

Assistant Professor
Department of Economics, CAS
1. Causes of Migration

2. Diversity and Challenges to National Integration

Female Labor Migration and Poverty Reduction

Information Sharing Service: RCT

400 Study Villages

Control Group
(100 villages)

Group 1
Report Card + Comic
(101 villages)

Group 2
Report Card only
(101 villages)

Group 3
Comic only
(98 villages)
Production Structure and Skills Formation

Martin Fiszbein
Assistant Professor
Department of Economics
Agricultural Staples and Development in Argentina

Ranching negatively affected development
Agricultural Diversity and Development in the U.S.

Agricultural Diversity (1860)  Input-Output Links of Agricultural Products

Effects of Agricultural Diversity on the Process of Development

Dependent variable: SHARE OF POPULATION IN MANUFACTURING
States & the Production of Human Capital

Heba Gowayed

Moorman-Simon Interdisciplinary Assistant Professor
Sociology, CAS
• What determines immigrant trajectories in a new country?

• Studies have argued that along with context human capital—the skills and capacities that immigrants hold—determines their mobility.

• But, they also find that human capital is not transferable.
I argue that human capital, typically examined as a crucial determinant of immigrant and refugee outcomes, is also *produced* through state incorporation policies.

1. States can *recognize* immigrant histories as human capital

2. States can *invest* in immigrants to build human capital
Culture, Capital & the Political Economy Gender Gap
Evidence from Meghalaya’s Matrilineal Tribes

Rachel Brulé

Assistant Professor of Global Development Policy
Pardee School of Global Studies, Boston University
**Political Economy Gender Gap: Male - Female Attitudes**

- **Political Participation**: Norms lead men to public sphere, women to private sphere
  - Plateau & Pecquod (2010); Franceschet, Piscope & Thomas (2015); Khan (2017)

- **Policy Preferences**: Norms lead women to prefer bigger caregiving state

**Surveyed representative sample of Shillong** *(February-July, 2015)*

- Full census of adults in randomly selected wards (Aug 2014–Feb 2015)
- Randomly sampled individuals from census roll
- Face-to-face interviews; four languages (Khasi, Mizo, English, Hindi)
- N = 3,509
- Randomization via tablet
- Equal groups:
  - Matrilineal men
  - Matrilineal women
  - Patrilineal men
  - Patrilineal women
- Supplemented with 100 qualitative interviews

**Culturally Sanctioned Resources**

- **Insight from anthropology**: Cultural norms govern which gender owns and manages wealth
  - Levi-Strauss (2008); Evans Pritchard (1951); Schneider et al (1962); Bareh (1967)
Treatment In Meghalaya, many people rely on the government for essential services. Do you support an increase in the funding of government programs for helping the poor and the unemployed with training, employment, and social services [even if this means that the government must raise money from people like you]? Yes or No.

Table 1: Effect of Personal Cost Treatment on Policy Preferences

<table>
<thead>
<tr>
<th></th>
<th>Patrilineal</th>
<th>Matrilineal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explicit cost to policy</td>
<td>-0.03**</td>
<td>-0.04**</td>
</tr>
<tr>
<td>Constant (control)</td>
<td>(0.01)</td>
<td>(0.02)</td>
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<tr>
<td>Observations</td>
<td>868</td>
<td>854</td>
</tr>
<tr>
<td>Women</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explicit cost to policy</td>
<td>-0.00</td>
<td>-0.04***</td>
</tr>
<tr>
<td>Constant (control)</td>
<td>(0.01)</td>
<td>(0.01)</td>
</tr>
<tr>
<td>Observations</td>
<td>838</td>
<td>850</td>
</tr>
</tbody>
</table>

Note: Demographic controls include: age, educational level, wealth index, and religion. Robust standard errors in parentheses: *p<0.10; **p<0.05, ***p<0.01.

Table 2: Effect of Postcard Treatment on Policy Preferences

<table>
<thead>
<tr>
<th></th>
<th>Patrilineal</th>
<th>Matrilineal</th>
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<tbody>
<tr>
<td>Men</td>
<td></td>
<td></td>
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<tr>
<td>Explicit cost to policy</td>
<td>-0.12**</td>
<td>-0.11</td>
</tr>
<tr>
<td>Constant (control)</td>
<td>(0.06)</td>
<td>(0.12)</td>
</tr>
<tr>
<td>Observations</td>
<td>101</td>
<td>50</td>
</tr>
<tr>
<td>Women</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explicit cost to policy</td>
<td>-0.03</td>
<td>-0.14***</td>
</tr>
<tr>
<td>Constant (control)</td>
<td>(0.02)</td>
<td>(0.04)</td>
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<tr>
<td>Observations</td>
<td>112</td>
<td>147</td>
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</tbody>
</table>

Note: Demographic controls include: age, educational level, wealth index, and religion. Robust standard errors in parentheses: *p<0.10; **p<0.05, ***p<0.01.
Improving the Corporate Governance of Non-Profits and the Implications for their Social Impact:
Evidence from a Randomized Program in Healthcare in the Democratic Republic of Congo

Caroline Flammer
Associate Professor
Dean’s Research Scholar
Strategy & Innovation, Questrom School of Business
• Research question:
  
  ➢ How can **non-profit** organizations **improve their governance** to **increase their social impact**?

  ➢ **Importance of research question**
    - For non-profit organizations per se
    - For donors and impact investors
    - For UN Sustainable Development Goals

  ➢ **Randomized governance program**
    - Implemented in healthcare sector of the DRC
    - About 1,000 non-profit health centers
      - Randomly assigned to treatment group and control group
    - “**Governance treatment**”:
      - Adoption of pro-social incentives, coaching, and auditing
• Key findings
  
  ➢ Adoption of governance bundle (pro-social incentives, coaching, and auditing) leads to
    - **Higher operating efficiency** (i.e. increase in health services per employee)
    - **Improved social performance** (i.e. reduction in stillbirths and neonatal deaths)
  
  ➢ Density of peer organizations matters
    - Governance **more effective** in regions **with lower density** of peer organizations
  
  ➢ **Funding is not a substitute** for governance
    - Health centers that receive funding only
      - Increase their scale (i.e. number of employees and services)
      - Do not improve operating efficiency nor social performance
  
  ➤ Pro-social incentives, coaching, and auditing play key role in
    - **Achieving non-profits’ social objectives** and
    - **Increasing social impact** of funds invested
Immigration Policy and Stay Rates of STEM PhDs

Megan MacGarvie
Associate Professor
Markets, Public Policy and Law, Questrom School of Business
Boston University

Research On Tap: Human Capital and Global Development

Foreign-born STEM PhDs play a critical role in the US economy; in many fields are the majority of workers

- US Immigration Act of 1990 allows a fixed number of employment-based permanent residency visas per country each year
  - Long delays in processing applications for China and India
- Reduced job mobility, spousal unemployment and increased uncertainty
- Does this make scientists more likely to leave the US?

![Graph showing US STEM PhD workers by origin]

- Engineering, CS, Math, Econ, Physics: 45.00%
- Other STEM fields: 74.53%
- From US: 14.85%
- From China: 26.07%
- From India: 9.19%
- From RoW: 3.12%

![Graph showing Expected Wait Time for Permanent Resident Visas for Recent U.S. STEM PhDs]

- Time to receive an EB-2 visa (years, 13-month moving average)
- Applications exceeded annual EB-2 limits starting in fiscal year 2005, triggering long wait times for applicants from China and India.
Each additional year of visa delay is associated with a 1.7 percentage point reduction in stay rates

- Controlling for personal and country-level characteristics
  - Passes placebo tests for permanent residents and Taiwan/Pakistan
- Returnees slightly more likely to come from top PhD programs
- Chinese much more likely to do basic research @ home
- Conclusion: visa quotas encourage return migration at the expense of US high-tech firms and universities
How to Make a U-Turn: Promoting Women’s Employment in KSA

Patricia Cortes
Associate Professor
Markets, Public Policy and Law, Questrom

Female Employment

e.g., US, Sweden today
Saudi potential
US 1920s
Saudi

Ln(Income/capita)
Women’s employment rate in Saudi Arabia remains extremely low by world standards, at close to 20%.

- **Potential Causes:**
  - Childcare and home production responsibilities
  - Strong gender norms
  - Transportation restrictions
  - Separate work spaces

- One of KSA’s key goals is to increase the participation of women in the labor market

**Which are the binding constraints?**

**We focus on the availability of child-care**
Pilot grant from MLS – HKS
- Online survey of 2000 women, 18-40 year olds.

**Figure 1 | Reasons Non-working Mothers With Children Younger than 18 are Not Searching for a Job**

- I want to focus on my children: 45%
- My husband/family does not want me to work: 37%
- Lack of affordable and/or high quality child care: 20%
- Lack of affordable and safe transportation: 18%
- Available jobs do not pay enough: 17%
- Other: 16%

Focus Groups to Teachers and Women working in Retail

- “Not only as a working mother but also as a woman who works for the society. There should be more motivations for us. You find many women who are willing to work [but] have 3 or 4 kids that have no one to take care of.”
- “I found it better if I worked in a night shift because I could save the money spent on day care and save 1300 Riyals for me.”
- “My husband’s income was ok, but every woman I know in my community works, so I felt like I needed to get busy – even if it meant that most of my salary would be spent on day care for my children and transportation.”

Next steps: Working with the Ministry to do an RTC with their childcare subsidy program.
Health Systems & Health Insurance Reforms: Implications for Healthcare Disparities within Marginalized & At-risk Populations

Lawrence Were, PhD

Assistant Professor
Department of Health Sciences, Sargent College
Department of Global Health, School of Public Health
werelpo@bu.edu
Keys Policy Questions:

1. What are the impacts of health reforms on health & economic outcomes in LMIC?

2. How are these reforms influenced and informed by Social Determinants of Health (SDH)?
   a. How do these interactions impact health & wellbeing?
### Panel A: Institutional Delivery

<table>
<thead>
<tr>
<th></th>
<th>CD4 ≤ 350</th>
<th>HIV DISEASE</th>
<th>CD4 &gt; 350</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>Coefficients</td>
<td>0.124**</td>
<td>0.18***</td>
<td>0.142**</td>
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<tr>
<td>(ATT)</td>
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<tr>
<td>Stand Errors</td>
<td>0.053</td>
<td>0.06</td>
<td>0.058</td>
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<tr>
<td>T-Statistic</td>
<td>2.326</td>
<td>2.977</td>
<td>2.437</td>
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<tr>
<td>N</td>
<td></td>
<td></td>
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<tr>
<td>Analytic Sample</td>
<td>640</td>
<td>640</td>
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<tr>
<td>Treatment</td>
<td>40</td>
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<tr>
<td>Control</td>
<td>523</td>
<td>505</td>
<td>523</td>
</tr>
</tbody>
</table>

### Health Insurance Coverage by Gender & Occupation in Kenya: 2008 & 2014

#### Unskilled Manual

- **Insured Men '08**
- **Insured Men '14**
- **Insured Women '08**
- **Insured Women '14**
- **Uninsured Men '08**
- **Uninsured Men '14**
- **Uninsured Women '08**
- **Uninsured Women '14**

#### Skilled Manual

#### Services

#### Household & Domestic

#### Agricultural

#### Clerical or Sales

#### Prof/Tech/Manager

#### Not Working

Legend:
- Maps/Lakes
- Kenya Boundary
- High: 3.87192
- Low: -0.281823

Data: HSTP, Extracted from ShinyApp Dashboard on the CDC/USAID website.
Creating Demand for HIV Treatment-As-Prevention

Jacob Bor

Assistant Professor
Department of Global Health
BU School of Public Health
HIV treatment prevents transmission

- HPTN-052 trial: 96% reduction in risk
- Cohort studies: 0 infections in >100,000 sex acts
- Shift in global policy: Universal Test-and-Treat (UTT)

Simulation: UTT could end epidemic
Granich et al *Lancet*

New infections under status quo
New infections if everyone treated
Even with UTT, many people present late, drop out of care, do not adhere to treatment.

Data are from South African National HIV Cohort, n=11M
Can information on treatment-as-prevention increase demand for early ART?

Major knowledge gaps (n=425 young adults, rural South Africa)

Objective v. perceived risk of transmitting HIV while on ART and virally suppressed

- Objective Risk: 0%
- Perceived Risk: 75%
- 1%
U=U could increase demand for early ART

- fatalism, altruism, stigma
- planned clinical and population-based trials
Pregnancy, Intimate Partner Violence, and the Life-course Approach to Child Health and Development

Nafisa Halim

Research Assistant Professor
Department of Global Health, School of Public Health
Research On Tap: Human Capital and Global Development

- Newborn deaths
- Childhood stunting
- Chronic conditions

Globally, an estimated 20.5 million babies were born with a low birthweight in 2015.

Source: LSTHM (n.d.); WHO (2019); Osmani and Sen (2003); Pastor-Moreno et al. (2019).

Fig. 1. The pathways from gender inequality to ill-health.

Boston University Office of Research

Source: LSTHM (n.d.); WHO (2019); Osmani and Sen (2003); Pastor-Moreno et al. (2019).
75%, female secondary school enrollment (gross) (UNICEF, n.d.)

75%, ≥4 antenatal care visits among pregnant women (WHO, n.d.)

Source: Grandjean and Perry (2015); Women Deliver (n.d.)
Child Neurodevelopment in South Africa

Peter Rockers
Assistant Professor
Department of Global Health, School of Public Health

Boston University Office of Research
Neurodevelopmental Foundations of Human Capital Formation

Scale of the problem:

250 million children under five (43%) in low- and middle-income countries are at risk of not reaching their developmental potential

Early intervention can improve developmental outcomes
- In the long-run, can strengthen cognitive and non-cognitive skills
- Positive impact on labor markets and economic development
**Child Neurodevelopment in South Africa**

**Aim 1. Evaluate Impact**

**Intervention**
- Monthly home visits
- Age-specific parental support related to:
  - Infection
  - Nutrition
  - Milestones
  - Play activities
  - Maternal well-being

**Outcome 1. EEG**

**Outcome 2. Eye-tracking**

*Collaboration with Prof. Amanda Tarullo Dept. of Psychological and Brain Sciences

**Aim 2. Explore Biological Mechanisms**

- Micronutrient status
- Systemic inflammation
- Neurodevelopment

**Aim 3. Establish a Cohort**

- EEG (6 mo.)
- BSID (2 yrs.)
- IDELA (6 yrs.)
- Reading/math scores (school age)
- Cognitive/non-cognitive skills (adulthood)
- Income (adulthood)
Combatting Disease, Pursuing Cures

Mahesh Karra
Assistant Professor of Global Development Policy
Frederick S. Pardee School of Global Studies
Work in Human Capital and Global Development

My research focus (broad):
• Relationships between population, health (maternal and child health), and economic development in low- and middle-income countries

Specific projects:
• Micro (Malawi, India) and macro (Demographic Dividend)
• Primary data approaches (field experiments, impact evaluation)
• Secondary data analysis, modeling (macrosimulation)

Research Methods:
• Quantitative and qualitative methods
• Economics, econometrics / applied statistics, demography
Current Fieldwork

**Non-Fieldwork Projects:** distance and measurement error, women’s autonomy and empowerment, women’s political participation, Demographic Dividend model, the health impact of the Iraq War
UPCOMING EVENTS

Learn more & RSVP: bu.edu/research/events
Topic ideas & feedback: research@bu.edu

RESEARCH ON TAP

Light as Medicine
November 20, 2019 | 4-6pm

Accelerating the Energy Transition
December 4, 2019 | 4-6pm

RESEARCH HOW-TO

Town Hall on International Research Collaboration – Med Campus
October 30, 2019 | 9-10:30am

Op-ed Writing and Pitching Workshop with The Conversation
November 6, 2019 | 3-5pm