Collecting Representative Panel Data in a Refugee Setting
Evidence from Southern Bangladesh

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Rohingya Refugees in Cox’s Bazar

August 2017

▶ New wave of violence against Rohingya residents of Rakhine, Myanmar
▶ Sparked mass migration to Cox’s Bazar, Bangladesh

November 2019

▶ 719,920 arrivals since August 2017
▶ 932,940 refugees living in Cox’s
▶ Most of them live in camps
The Cox’s Bazar Panel Survey (CBPS)

Key features:

- Representative of refugees and hosts near and far from camps
- Mixed-methods study, multi-topic surveys
- Panel dimension allows to study the trajectories of
  - Households
  - Two randomly selected adults
  - Two cohorts of adolescents and an adult caregiver in a subsample of households

Partners: GAGE/ODI, Yale University, World Bank
Key Facts about CBPS Sample

Two-stage sampling design

Listing in selected PSU:

- 45,916 households,
  - 218,000 people
  - Camps & host communities, near and far
- Household residents:
  - Camps 4.6, Hosts 5.0
- Female headed households:
  - Camps 30%, Hosts 13%

Survey sample:

- 5,020 households surveyed
- Information on 25,316 household members
- 9,386 in-depth adult surveys
- 50% camp residents <15
- 1% in host communities identify as Rohingya
CBPS Goals

- Generate
  - Descriptive evidence
  - Causal evidence
- To inform
  - Selection and design of interventions
  - Big policy questions
- Via large representative samples
  - Continued data collection on “panel” sample of 5,000 HH
  - Randomized rollout of interventions in listing of 45,000 HH
Descriptive evidence

- Representative sample of 5,000 households from both host and refugee communities
- Wave 1 (Apr-Jul 2019)
  - Comprehensive characteristics and measures of wellbeing
  - Identify needs and guides intervention design
  - Today's presentation on assets, prices, and labor markets is a start
- Wave 2 (Exp. Jul-Oct 2020) and future survey rounds
  - How does household wellbeing change over time?
  - What characteristics are associated with positive or negative changes?
Evidence of effectiveness

- Randomized evaluations
  - Credible method to establish causal relationships
  - Built-in control group: sample of 5,000 HHs
  - Large pool for treatment group: listing of 45,000 HHs
  - Allows for multiple interventions to understand the best combination

- Other methods
  - Some things, like transportation infrastructure, are difficult to randomize but important to study
  - Rollout can create “natural” treatment and control groups
Household Interview: Overview of Topics Covered

Administered to one adult household member

- Household roster: current and former household members, education, and employment
- Household characteristics: dwelling building materials, population density
- Consumption and food security: a seven-day food consumption recall; food scarcity and coping strategies
- Assistance: types of aid or assistance received by the household and assistance bartered
- Asset: key assets owned, resale value, ownership in July 2017
- Anthropometrics: height and weight for one randomly selected child under the age of 5
Adult Interview: Overview of Topics
Administered to two randomly selected member age >15 or above

- Labor market: employment activity, past week and past year
- Labor market history: employment in July 2016-July 2017
- Migration history: short-term migrations in the past year and long-term migrations since age 12
- Use of health services: health care utilization, status, and expenditures; and commuting time to clinics
- Crime and conflict: exposure to crime and conflict at home and in the neighborhood
- Trauma and mental health: traumatic experiences depressive symptoms, and trauma symptoms
Preliminary Findings

**Labor markets**
- Host employment and earnings increased modestly
- While similarly productive pre-displacement, refugees earn much less post-displacement

**Assets**
- Refugees experienced major losses of productive assets
- No evidence of dissaving by hosts

**Prices**
- Suggestive evidence that food aid is traded, with mixed effects on prices
- But prices fluctuate significantly for reasons unrelated to displacement
Important disclaimers

- Comparisons here are informative but *not causal*
- In the interest of time, will elide some methodological details
Key Findings - Labor markets

- Host employment and earnings increased modestly
- While similarly productive pre-displacement, refugees earn much less post-displacement
Any Employment in Prior 12 Months

High post-displacement employment among refugees likely explained by in-camp volunteer activities

Labor force participation differs across groups
Host Earnings

Empirical CDF

Annual earnings in USD

Pre
Post

Monetary earnings from primary jobs over a 12 month period. Excludes respondents who report not being employed or temporarily absent from work. Excludes employed respondents who refused or did not know earnings.
Refugee Earnings

Monetary earnings from primary jobs over a 12 month period. Excludes respondents who report not being employed or temporarily absent from work. Excludes employed respondents who refused or did not know earnings.
Refugees and Hosts Equally Productive Pre-Displacement

CDFs of residuals from regressing log earnings on age, age squared, gender indicator, and education indicators. Regressions estimated using host respondents only.
Refugees Much Less Productive Post Displacement

CDFs of residuals from regressing log earnings on age, age squared, gender indicator, and education indicators. Regressions estimated using host respondents only.
Key Findings - Assets

- Refugees experienced major losses of productive assets
- No evidence of dissaving by hosts
Dwelling

Refugee
Dwelling
Host

Refugee
Residential land
Host

Fraction of Households

Never  Lost  Acquired  Always
Key Findings - Staple food prices

- Suggestive evidence that food aid is traded with mixed effects on prices
- But prices fluctuate significantly for reasons unrelated to displacement
Key Findings - Staple food prices

Prices

Ratio of high- to low-spillover median prices

<table>
<thead>
<tr>
<th>Not aid item</th>
<th>Aid item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tomato*</td>
<td>Soybean oil</td>
</tr>
<tr>
<td>Chicken*</td>
<td>Rice – Coarse</td>
</tr>
<tr>
<td>Shrimp*</td>
<td>Rice – Medium</td>
</tr>
<tr>
<td>Potato</td>
<td>Lentils</td>
</tr>
<tr>
<td>All dried fish (Shutki)</td>
<td></td>
</tr>
</tbody>
</table>
Rice prices

Data from WFP VAM.
Lentil prices

Data from WFP VAM.
Oil prices

Data from WFP VAM.
Implications and policy prescriptions

- Preliminary results show no evidence of negative spillovers in labor markets, prices, or assets
- Refugees are underutilized resource, could generate significant value
- Food aid now from wholesalers in Dhaka- can we generate positive spillovers through more local purchases?
Opportunities for future collaboration

CBPS is a platform to support both tracking and experimental evaluations

1. First wave of data → Rich descriptive statistics
2. We plan to follow this sample at 12-18 month intervals
   ▶ Track evolution of socio-economic conditions
   ▶ Gauge effects of programs, policy, and infrastructure.
3. The 40,986 listing:
   ▶ Large sampling frame for future impact evaluations
Thank you and please be in touch!

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