Introduction to the Economics of Development

4. Why Do People Stay Poor? Part 2

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Today's plan

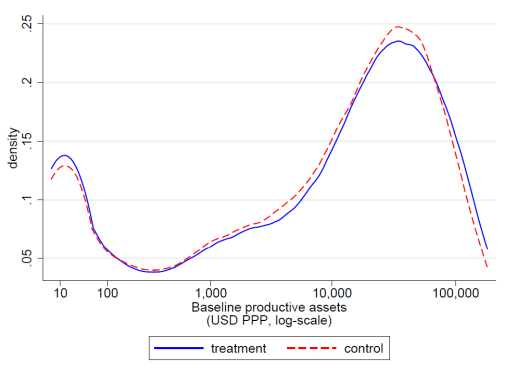
1. See what we did last lecture in action in Bangladesh.
2. Theory: Misallocation.
3. Econ method: Counterfactuals.
4. Empirics: More on RCTs.
5. Answer our first question!

Quick recap

- The question: Why do people stay poor?
- We want to distinguish between (a) differences and (b) poverty traps.
- We wrote down some theory: $K_{it+1} = s \cdot A_i \cdot f(K_{it}) + (1 - d) \cdot K_{it}$.
- The theory generated a testable implication: The existence of a threshold $\bar{K}$ above which incomes rise, and below which they fall $\Rightarrow$ poverty traps!
- We discussed endogeneity and how an RCT could solve the problem.

Lets put it into practice — Balboni et al. (2022)

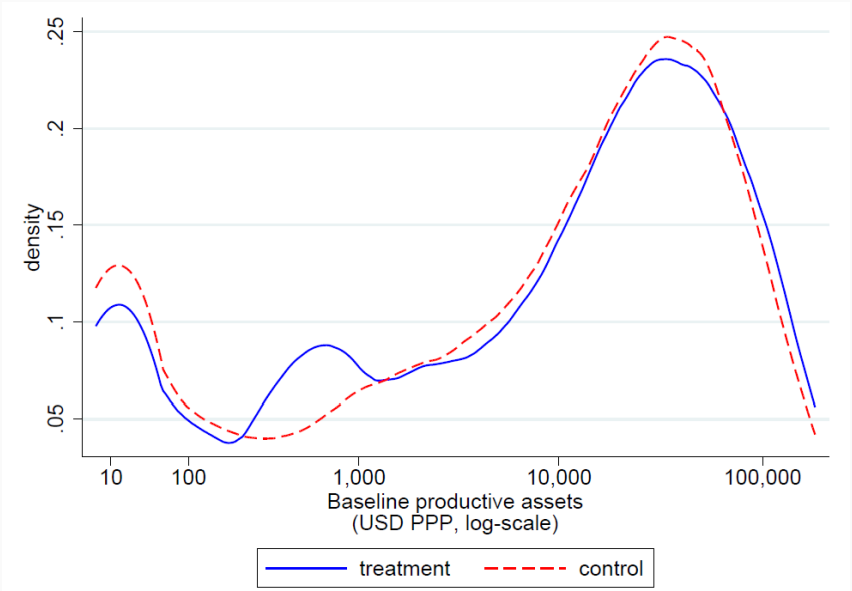
- Setting: 6,000 poor households in rural Bangladesh tracked from 2007 to 2018, focus on women.
- Simple occupation structure: Those who own land or livestock combine it with their labor and hired labor, those who don't work as casual laborers. Leads to a bimodal asset distribution:



The experiment

- Use an existing transfer program: BRAC Targeting the ultra-poor program.
- Over the 6,000 participants BRAC randomly gives 3,000 assets worth 488 USD PPP, mainly in the form of a cow.
- Do you have any ethical concerns with this RCT?

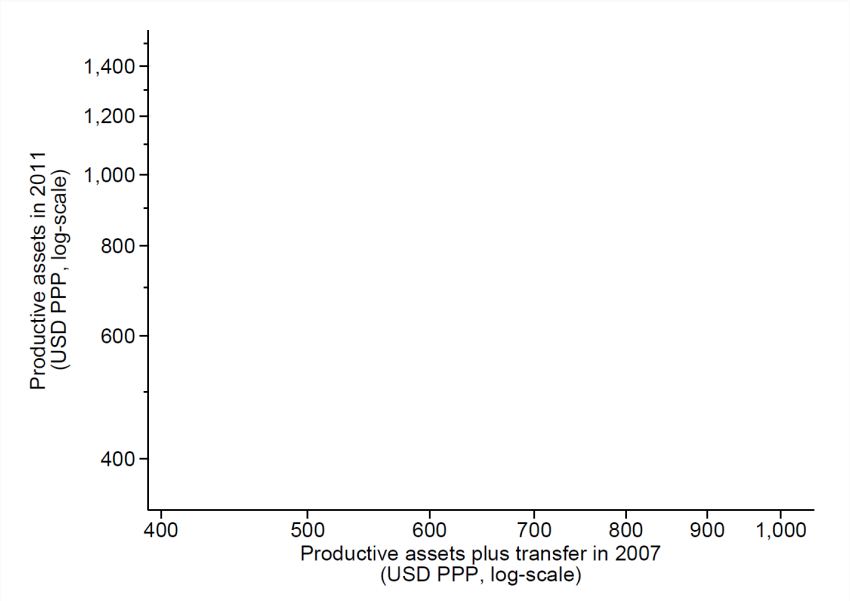
Crucial question: Will the asset transfer be sufficient?



The plan

- Initial asset distribution implies $\bar{K} \approx 500$ USD PPP.
- So, fortuitously, the transfer will take many treated households over the threshold.
- Do those who are moved above $\bar{K}$ increase in wealth over time, and those below $\bar{K}$ decrease (or flat line).

Is there an S?


1,400
1,200
1,000
800
600
400
Productive assets in 2011
(USD PPP, log-scale)
400
500
600
700
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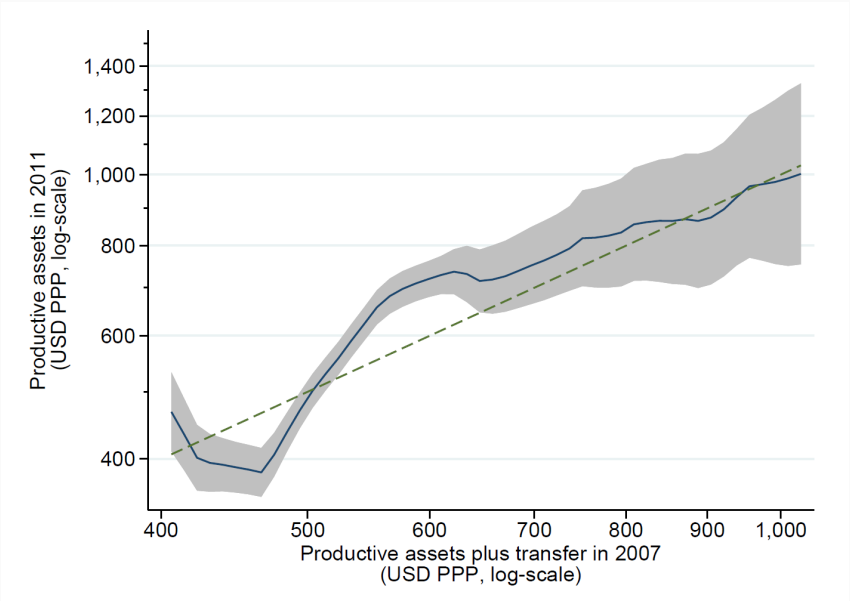
1,000
Productive assets plus transfer in 2007
(USD PPP, log-scale)

Is there an S?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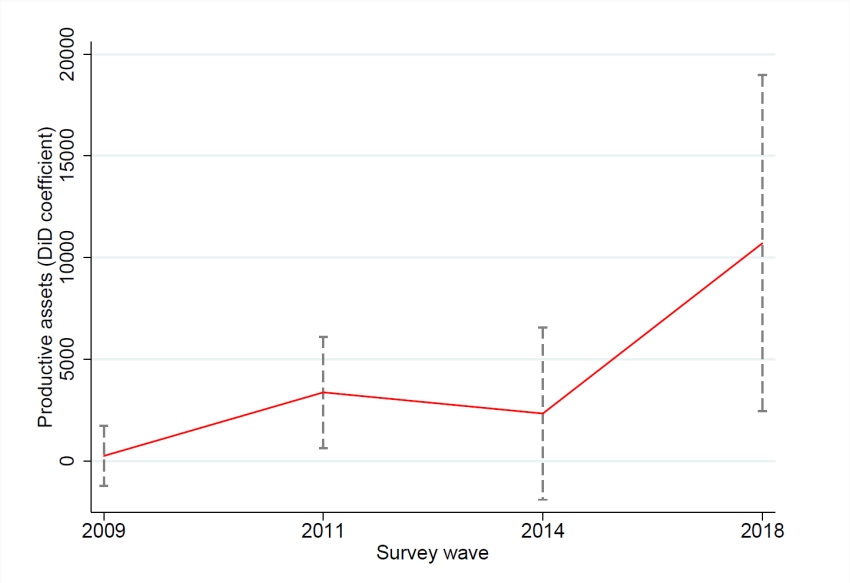
Do treated households escape poverty?



Summary

Balboni et al. 2022 show that poverty traps are the reason why the poor stay poor.

Any problems with this statement?

Balboni et al. 2022 show that the "ultra poor" in some Bangladeshi villages exhibit behavior consistent with a poverty trap explanation of persistent extreme poverty. A large asset transfer moves them from ultra-poor to fairly poor over a decade.

Difference: External validity.

Two questions

These results raise two questions.

1. How much are we leaving on the table?

2. Are the results externally valid?

How much are we leaving on the table

- The current distribution is not optimal.

- In Econ every inoptimality comes from a friction (market failure). What is the friction?
  1. Transport costs.
  2. Incomplete credit markets.
  3. Monopolistic power.
  4. Labor market frictions.

- The question: How different is reality from the "first-best" with no frictions?

How different is reality from the "first-best" with no frictions?

- How do we answer this?
- Need to know how good things would be in the counterfactual world with complete credit markets.
- Estimating counterfactuals is another use for econ models.
- The theory is more involved, we need to know how individual choices would differ under a different state of the world.
- Necessarily we will need to make more assumptions, and ones that are harder to defend.

What choices are key here?

- To create a counterfactual world we need to know what choices are important.
- We still want to keep things as simple as possible: What should I eat, when should I marry, how many children should I have — all important choices but not first-order here.
- Recall — women in these villages almost all work in either "livestock" or as a casual laborer. Richer in the former, poorer in the latter.
- Points to a key choice $\rightarrow$ occupation.

Forming the counterfactual

- Modeling individual occupation choice: livestock or laborer.
- How do choices differ under complete credit markets?
- How much on aggregate is the economy better off with the unconstrained choices?

Modeling occupation choice

- Constructing a counterfactual is pretty involved — we will just touch on the main points of intuition here.
- Individuals choose three things:
  1. How many hours to work as a laborer: h.
  2. How many hours to work in livestock: l.
  3. How many hours of farm help to hire: h'.
- Individuals get some benefit for each hour worked, and incur some cost.

Activity	**Benefit**	**Cost**
h	w	Dislike working
l	Benefit depends on K_{it}	Dislike working
h'	Benefit depends on K_{it}	w'

Results

Total misallocation = 15m USD. Total cost = 1m USD.

General equilibrium effects

- If almost everyone starts rearing livestock this might affect prices.
- If livestock prices fall we will have overestimated the loss due to misallocation.
- This is called a general equilibrium effect — a catch-all term to describe how prices and other variables may change if large numbers of people change their actions.
- Taking GE effects into account can get complicated, but it is necessary to understand how scaled-up interventions might work.

Summary

Balboni et al. 2022 have shown:

- Among poor rural households in Bangladesh a large asset transfer allowed some HH to switch occupations and escape extreme poverty.
- Returns are long-lasting and far in excess of the initial cost.
- Strong evidence for the poverty-trap explanation of persistent poverty and against the differences explanation.

In doing this we have discussed the following concepts:

- The Econ method of doing research.
- A simple theory of poverty traps.
- Identification.
- Endogeneity.
- RCTs.
- External validity.
- Misallocation.
- Counterfactuals.

Answering our question.

Q: Why do people stay poor?

- Balboni et al 2022, have provided compelling evidence in a specific setting.
- How general is this?
- Let us quickly consider other evidence.

Kraay and McKenzie 2014: "Do Poverty Traps Exist? Assessing the Evidence."

- Take a more macro view — consider poverty traps at the country level.
- Survey the literature to look for evidence for various types of poverty trap:
  - Hunger-based traps.
  - Occupation-based traps.
  - Behavioural poverty traps.
  - Geographic poverty traps.
- Conclude that only geographic poverty traps have supporting evidence.
- Other papers have also found evidence that geography is key e.g. Lagakos, Mobarak, and Waugh 2023.

The fractal poverty traps theory

- Main citation: Barrett and Swallow (2006)
- The idea is that instead of one poverty trap that you're either stuck in or not, the world is better described as many small poverty traps at almost every income level.
- Therefore, overcoming one poverty trap won't necessarily lift you completely out of poverty.
- In the extreme, with very small traps, we're back in the differences world.
- Balboni et al. 2022 could be seen as giving evidence for fractal albeit fairly large poverty traps.
- Fractal poverty trap theory also emphasises that traps exist at different levels. Individual, community, national etc.

So, what's the answer?

Why do poor people stay poor?

1. Due to poverty traps.
2. Due to individual differences.
3. Bit of both, but mainly poverty traps.
4. Bit of both, but mainly individual differences.
5. I DON'T KNOW STOP ASKING ME PLZ.

Next lecture

Are natural resources a solution or a trap?