

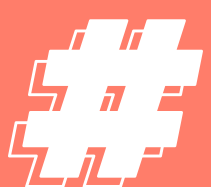


PARIS SCHOOL OF ECONOMICS  
ÉCOLE D'ÉCONOMIE DE PARIS



## The question to... Eric Teschke

How can governments  
**target social policies**  
to those most in need



**ECONOMICS**  
FOR **EVERYBODY**



# Context <sup>1/3</sup>

When social programs prioritize the poorest, economists call this **targeting**.

## Q Why target?

### FOR EQUITY

Targeting leads to redistribution and reduces inequalities.

### TO OPTIMIZE RESOURCE USE

Government budgets are limited, targeting directs resources to those who need them most.



Many economists study the effect of social policies, assuming that they are well received.

But studying targeting is important:  
**no social policy can work if it does not reach those it is intended for.**

# Context <sup>2/3</sup>

**In developing countries targeting is a huge challenge.**

## **Q The economy is informal**

Key targeting data, such as income information, is often unavailable – particularly for the poorest populations.



**Targeting is even more important:**

**GOVERNMENT BUDGETS ARE MUCH SMALLER**

**POVERTY LEVELS ARE MUCH HIGHER**



# Context 3/3

In the absence of formal income/wealth data, governments use **approximative targeting methods, like Proxy-Means Tests (PMTs).**

- 1 Conduct surveys on poverty and household characteristics (housing, demographics, assets) for a subset of the population.
- 2 Use these surveys to build a statistical link between characteristics and poverty, and **predict poverty levels** for everyone.
- 3 Base targeting on these predictions and implement policies for several years without updating.

- But, current evidence suggests that these approaches lead to **large targeting errors.**
- This questions the effectiveness of social protection in developing countries.



# Is targeting evaluated correctly?

**Q** The existing methodology assumes that:

- Observed poverty is true poverty.
- Targeting errors are stable over time.

**But poverty is measured with errors and it might be dynamic over time.**

**2023**



**2024**  
Avian Flu



# Research Question and Data

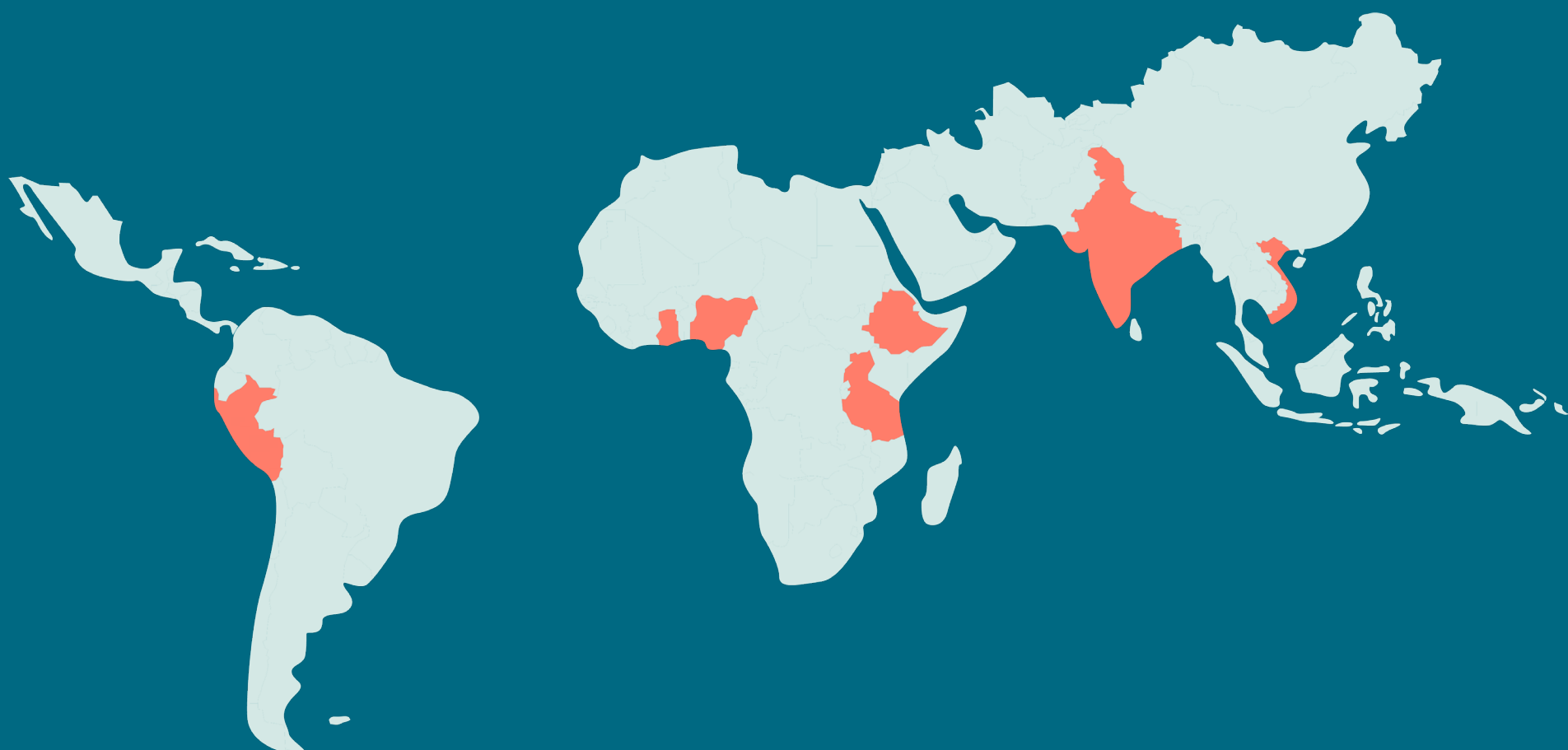
If we would have the data to **evaluate**  
**targeting over time**, what would we find?

Do targeting errors  
increase over time,  
excluding even more  
poor people?

Can we design  
better targeting that  
optimizes accuracy  
over time?

## Q Data used

Large household surveys from 8 countries across 3 continents that track households over several years, recording both their poverty status and key characteristics.





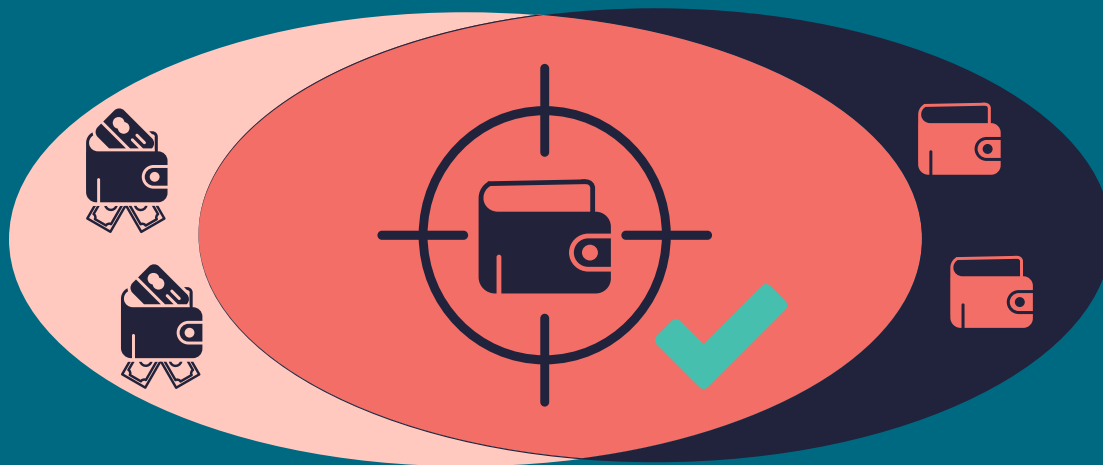
# Targeting outperforms expectations

## Existing evaluation methodology

Comparing PMTs to "perfect targeting" (observed poverty in one period) shows high targeting errors across all countries: **25% of the population** is wrongfully excluded or included.

## Introducing time

But after one period, "perfect targeting" also has large targeting errors. This is because **observed poverty is very dynamic** due to transient shocks and measurement errors.



- Targeted but not poor households
- Poor households correctly targeted
- Poor households but not targeted

Additionally, the PMT's performance remains remarkably stable over time, because it successfully:

- Includes chronically poor households.
- Excludes permanently non-poor households.

When evaluating targeting over the relevant time period and when focusing on the groups we care most about, the PMT performs **much better than expected**.

# Can targeting be further improved?

## Updating the PMT

Fully updating the PMT in every period **eliminates the small error increase** over time.

But full updates are expensive. Partial updates—only the predictive function or population characteristics—bring **limited improvements**.

## Alternatives

Alternatives, such as targeting households based on their average poverty in the past, show **no major gains over the PMT**. Neither does predicting future poverty to target vulnerability nor Machine Learning.

**The standard PMT is highly effective in targeting the chronically poor and excluding the non-poor.**



# Conclusion



**On the way to universal social protection, developing countries should:**

- Use PMTs to target chronic poverty.
- Rely on additional programs—like disaster relief or insurance against shocks—to address transient poverty.

## Source

Teschke E., Willis J., 2024, *Targeting Dynamic Poverty*, PSE Manuscript.