

Using Evidence to Improve Social Protection Programs in Indonesia

Benjamin Olken, MIT

“Targeting the Poor: Evidence from a Field Experiment in Indonesia”

with Alatas, Banerjee, Hanna, and Tobias

“Self-Targeting: Evidence from a Field Experiment in Indonesia”

with Alatas, Banerjee, Hanna, Purnamasari, and Wai-Poi

“The Power of Transparency: Information, Identification Cards, and Food Subsidy Programs in Indonesia”

with Banerjee, Hanna, Kyle, and Sumarto

Motivation

- Indonesia has been gradually moving away from non-targeted subsidies (fuel, electricity, food) to targeted transfer programs
 - Examples: Raskin (rice), scholarships, health insurance, CCTs, UCTs.
- Indonesian government faces several challenges with these programs
 - How to we most effectively *target* these programs – i.e. how does the government determine who should be recipients of the programs? Move towards a “unified database” – but who does it include?
 - How we ensure that programs are *implemented* effectively?
- Use randomized trials to answer these questions

Targeting

- Targeting entails a different set of challenges in developing countries because governments lack reliable data on incomes
- Several methods used to address this problem entail a tradeoff between information and local preferences:
 - Proxy-means testing (PMT): government collects data on hard-to-hide-assets to proxy for consumption
 - Community-based targeting: allow local community discretion to decide who is poor
 - Self-selection: allow people to apply, and then do PMT – hope that those who think they will pass will choose to apply

What we do in these papers

- Working with the Indonesian government (TNP2K, Bappenas, BPS), we randomly assigned villages to different targeting methods:
 - Project 1: PMT, Community, and a Hybrid (600 villages)
 - Project 2: Automatic PMT vs. Self-selection PMT (400 villages) in context of PKH program
- Using a randomized controlled trial allows us to assess the impact of these different targeting methods by comparing across them
- Use a baseline survey – conducted before the targeting project started – to assess households' true poverty level
- Which method performed best at identifying the poor?

Project 1:

PMT vs. Community Targeting

- This study examined a special, one-time real transfer program operated by the government
 - Beneficiaries would receive a one-time, US\$3 transfer (PPP\$6)
- Sample consists of 640 sub-villages (rural and urban) across 3 provinces in Indonesia

The PMT Method

- Government chose 49 indicators, encompassing the household's home (wall type, roof type, etc), assets (own a TV, motorbike, etc), household composition, and household head's education and occupation
- Use pre-existing survey data to estimated district-specific formulas that map indicators to PCE
- Government enumerators collected asset data door-to-door
- PMT scores calculated, and those below village-specific (ex-ante) cutoff received transfer

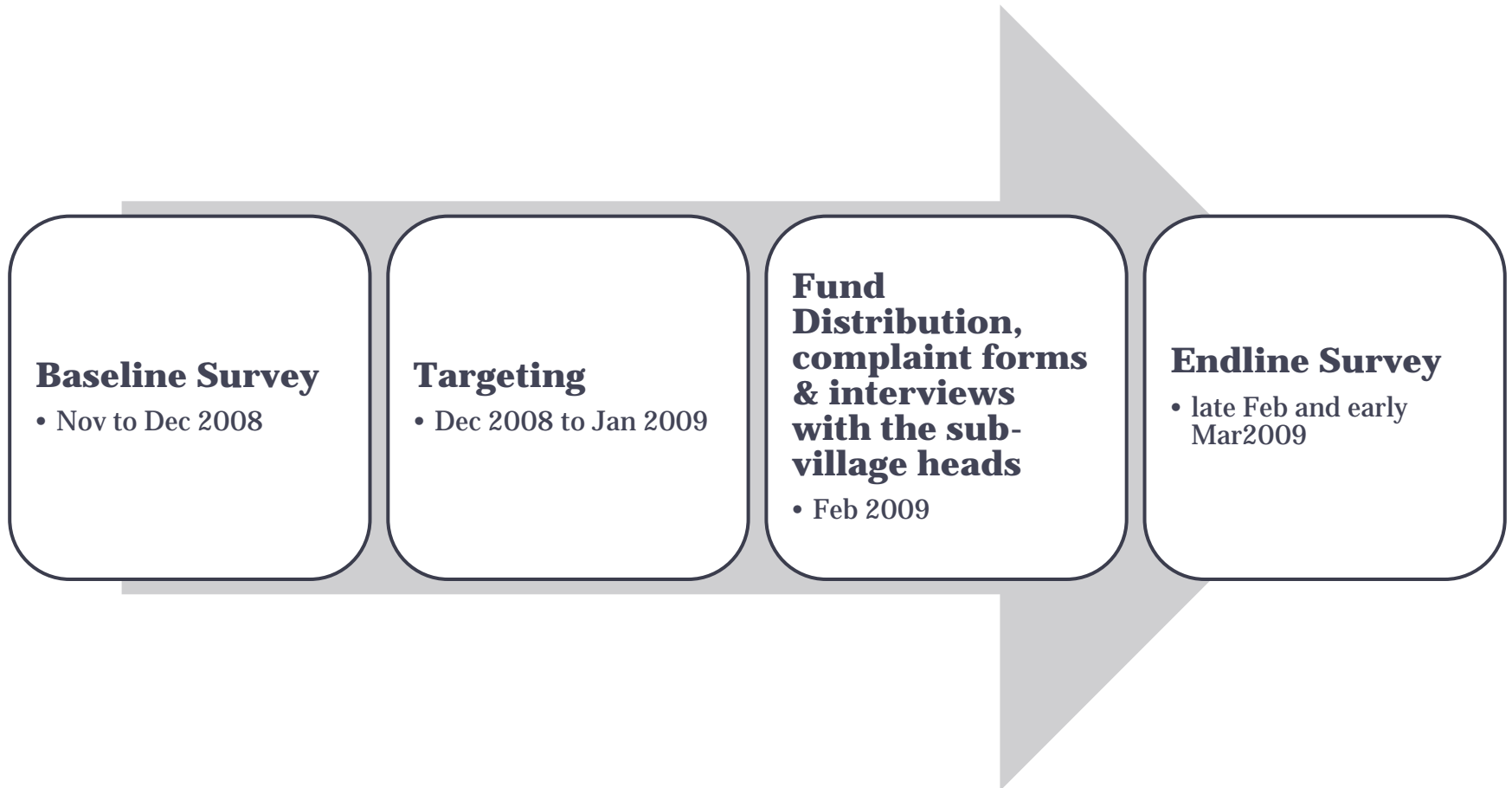
The Community Method

- Goal: have community members rank all households in sub-village from poorest (“*paling miskin*”) to most well-off (“*paling mampu*”)
- Method:
 - Community meeting held, all households invited
 - Stack of index cards, one for each household (randomly ordered)
 - Facilitator began with open-ended discussion on poverty (about 15 minutes)
 - Start by comparing the first two cards, then keep ranking cards one by one
- Also varied who was invited (elites or everyone)
- Hybrid combined community with PMT verification of very poor

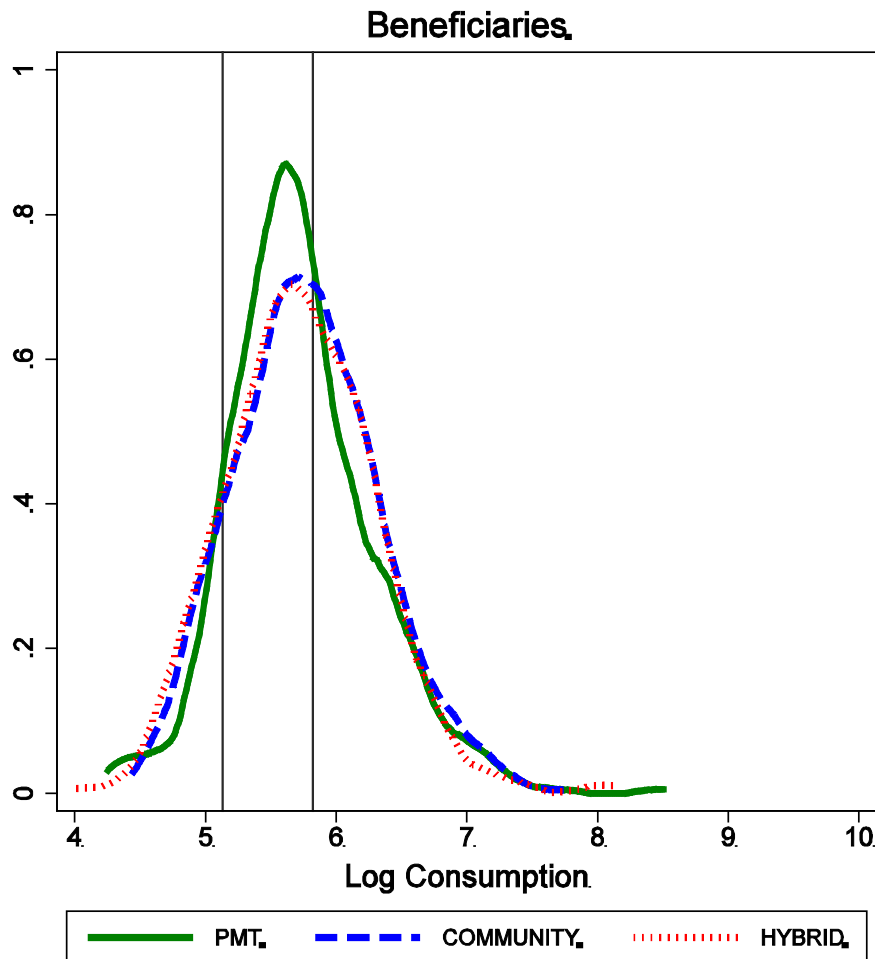




Time Line



Distribution of Per Capita Cons.



- PMT centered to the left of community methods—better performing on average
- However, community methods select slightly of the very poor (those below PPP\$1 per day)
- On net, beneficiaries have similar average consumption

Community Satisfaction: Endline

	Is the method applied to determine the targeted households appropriate? (1=worst,4=best)	Are you satisfied with P2K08 activities in this sub-village in general? (1=worst,4=best)	Are there any poor HH which should be added to the list? (0=no, 1 = yes)
Community treatment	0.161*** (0.056)	0.245*** (0.049)	-0.189*** (0.040)
Hybrid treatment	0.018 (0.055)	0.063 (0.049)	0.020 (0.042)
Observations	1089	1214	1435
Mean in PMT treatment	3.243	3.042	0.568
	Number of HH that should be added from list	Number of HH that should be subtracted from list	Number of complaints in the comment box
Community treatment	-0.578*** (0.158)	-0.554*** (0.112)	-1.085*** (0.286)
Hybrid treatment	0.078 (0.188)	-0.171 (0.129)	-0.554** (0.285)
Observations	1435	1435	640
Mean in PMT treatment	1.458	0.968	1.694

Paper 2: Automatic PMT vs. Self-selection PMT

- One way to do so is to impose program requirements that are differentially costly for the rich and the poor (Nichols and Zeckhauser, 1982; Besley and Coate, 1992)
 - Welfare programs with labor requirements (WPA, NREGA)
 - Food schemes with lower quality food
 - Wait in a long line to apply for a program
- But, may not necessarily work
 - Maybe the poor can't afford to miss work? Or the rich can send their maid to wait?

Setting for Project 2:

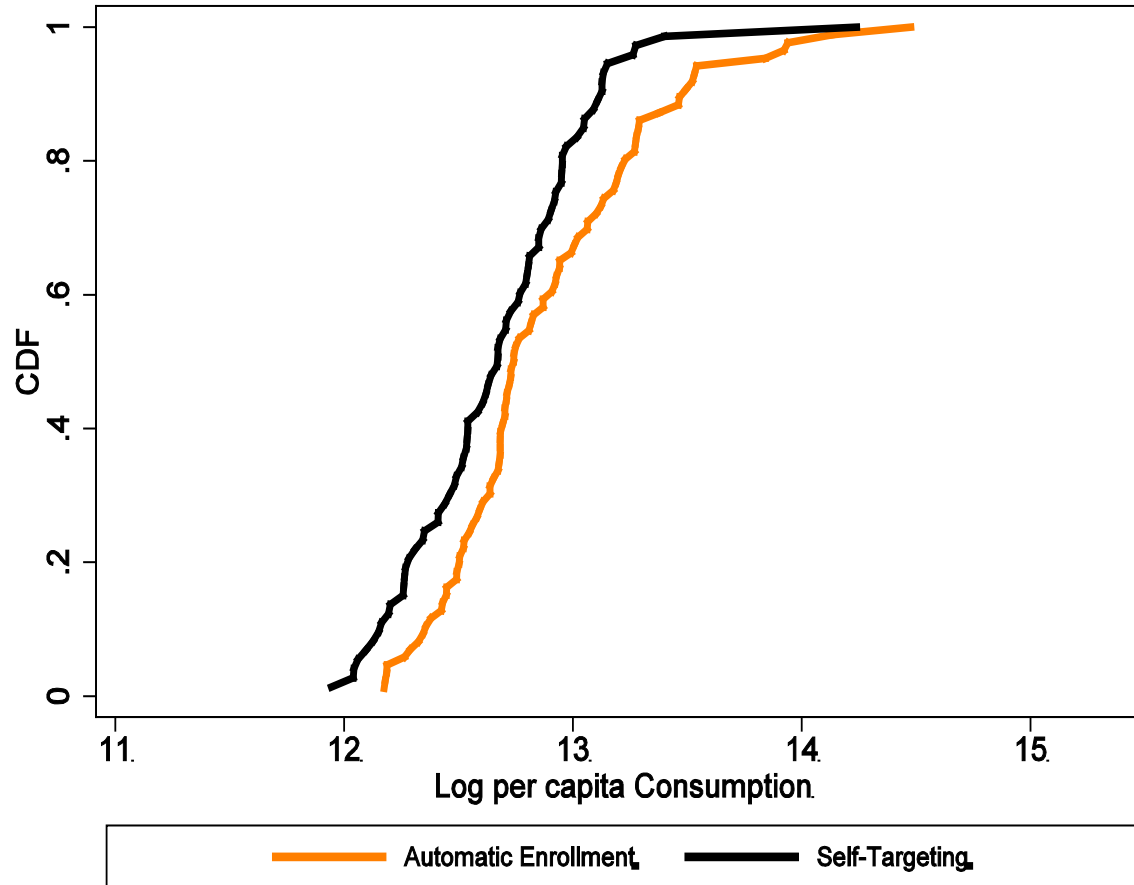
- Experiment Takes place in the context of Indonesia's Conditional Cash Transfer Program, PKH
 - Must be very poor, defined as $< 80\%$ of poverty line
 - High stakes: household annual benefits between Rp. 600,000 (US\$66) and Rp. 2,200,000 (US\$245) per year (11% consumption for a typical beneficiary)
- We examine the expansion of the program to 400 new villages in 3 provinces in Indonesia
- Test Automatic PMT vs. On-Demand PMT
- Has implications for on-demand application

Explaining the Program

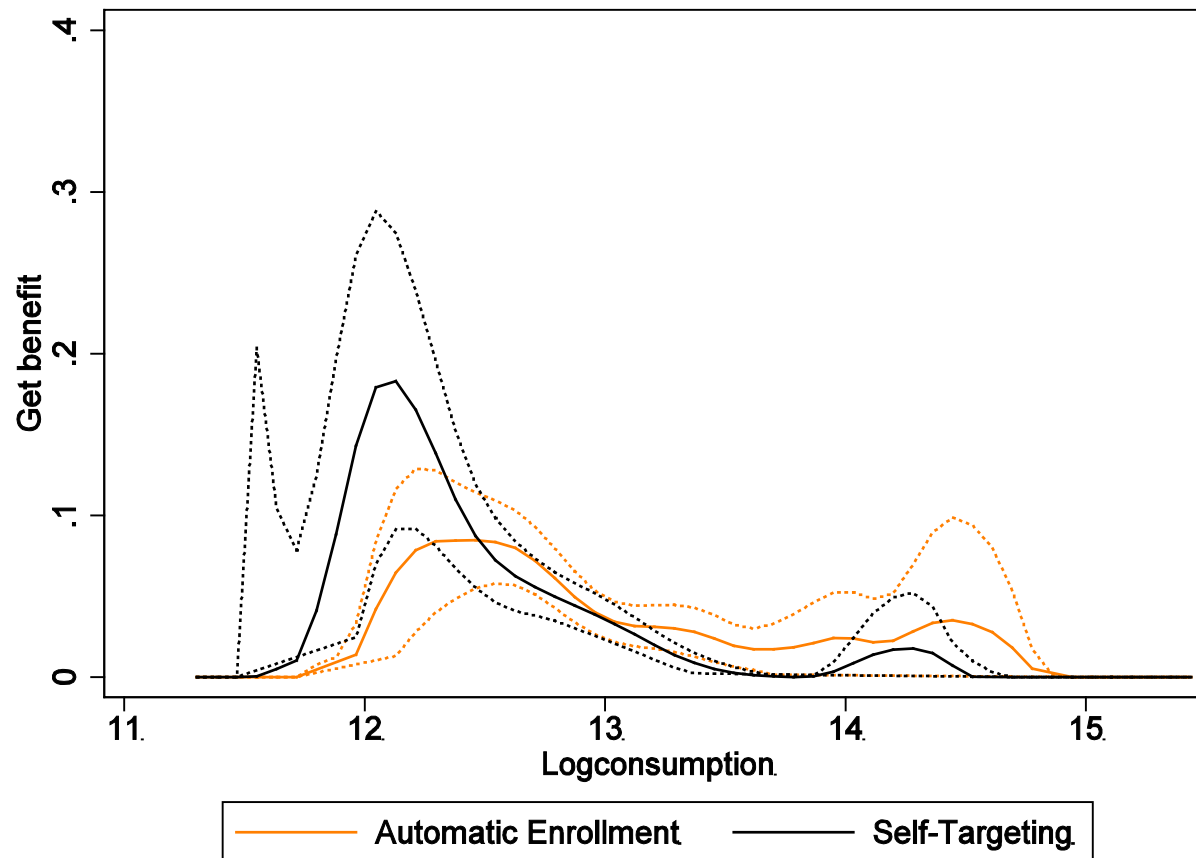


Application Process





- Self Targeting leads to a poorer distribution of beneficiaries



- ST reduces both exclusion and inclusion error:
 - 16 percent of those who are in the bottom 5 percent receive benefits in ST , as opposed to 7 in AE (sig at 10% level)
 - Households in top 50 percent of consumption are more than twice as likely to receive benefits (sig at 1% level)

Transparency

- Field experiment in 572 villages, in conjunction with the Indonesian government
 - Will an increase in information to eligible households increase their subsidy received?
- In 378 randomly chosen villages, eligible households received a “Raskin id card”
 - Conveys information on eligibility and entitled quantity



Effect of Cards on Raskin?

	Bought last two months	Quantity	Price	Subsidy
<i>Eligible</i>				
Card	0.02 (0.01)	1.25*** (0.24)	-57*** (18)	7,455*** (1,328)
Control Mean	0.79	5.29	2,276	28,605
<i>Ineligible</i>				
Card	-0.06*** (0.02)	0.07 (0.19)	-35 (24)	526 (1,035)
Control Mean	0.63	3.46	2,251	18,754

- Subsidy increases by about ~26% for eligible
- No overall decrease in quantity for ineligible
- Cards scaled up nationwide

Conclusions

- These three projects investigated alternative approaches to identifying poor households, and the role of transparency in improving transfers
- Found that:
 - Community targeting did about the same as PMT in terms of identifying people based on per-capita consumption, but much better in terms of local poverty metrics.
 - Self-targeting did a much better job at differentiating between poor and rich than automatic PMT, although it does impose costs on applicant households
 - Transparency can substantially improve implementation
- Implementation
 - Government scale-up of cards nationwide
 - Incorporation of community elements into national targeting; ongoing discussion of on-demand application
 - [Video](#)