



Social Protection in Developing Countries: Lessons from Indonesia

Rema Hanna

Jeffrey Cheah Professor of South East Asia Studies, Harvard

Asian Development Bank Talk



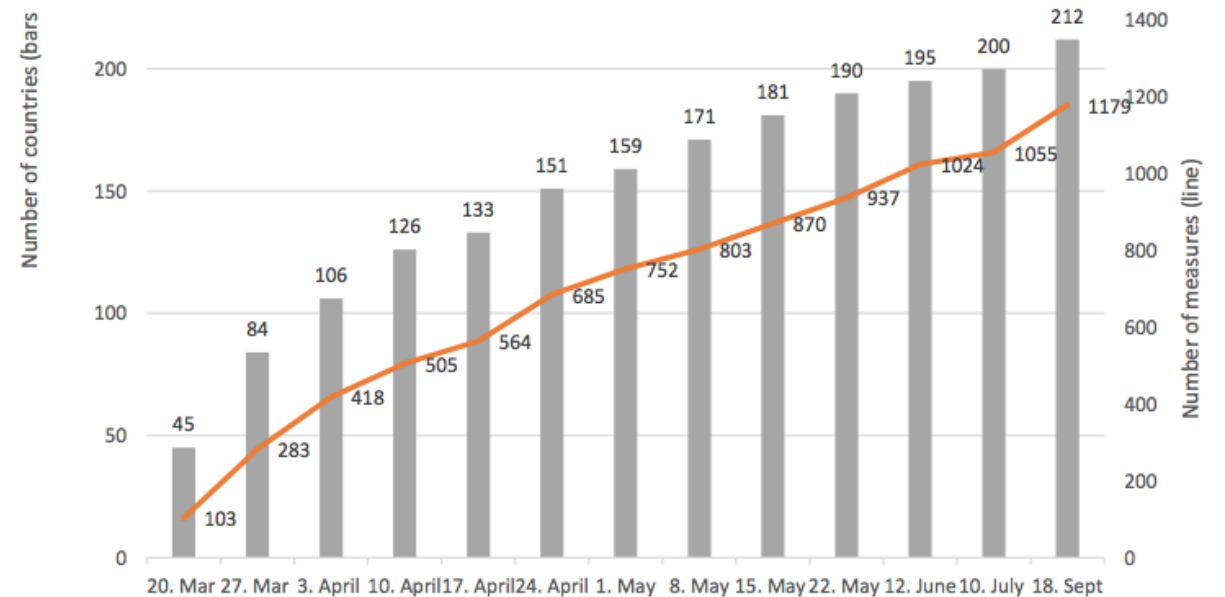
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Evidence for Policy Design

COVID-19 Crisis: Exposed Social Protection Needs

- Economic crisis brought on by COVID-19 emphasized the importance of effective social protection systems
- In fact, 212 countries or territories have planned or put in place 1,179 social protection measures

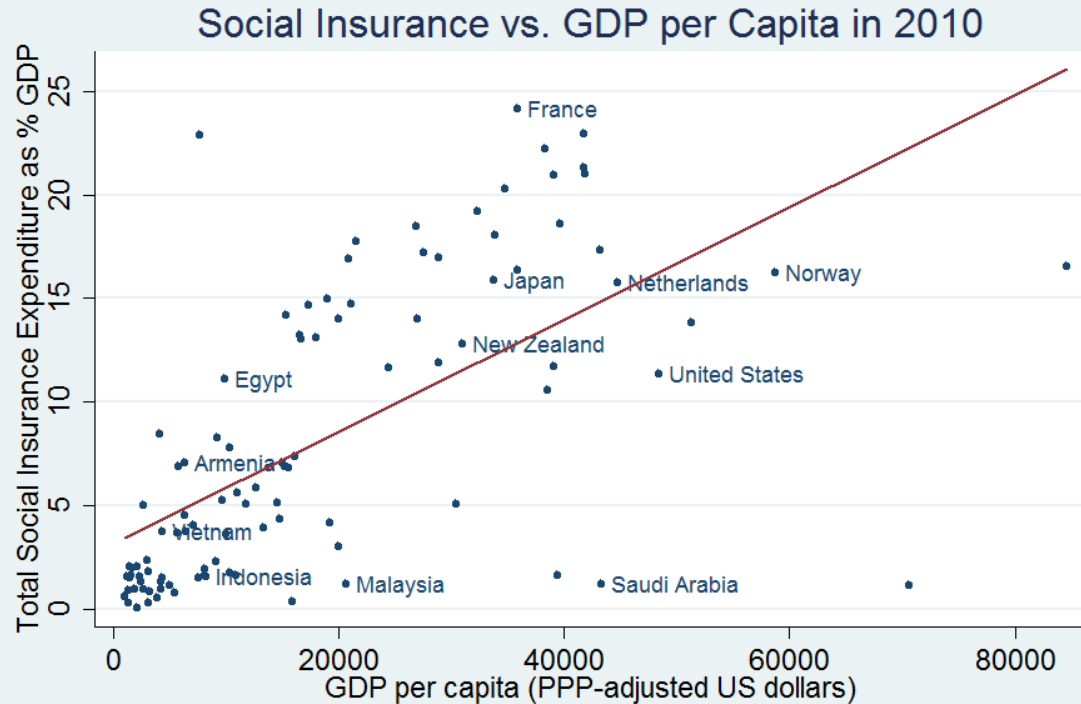
Figure 1. Trends in countries' social protection measures, March-September



Source: World Bank, 2020

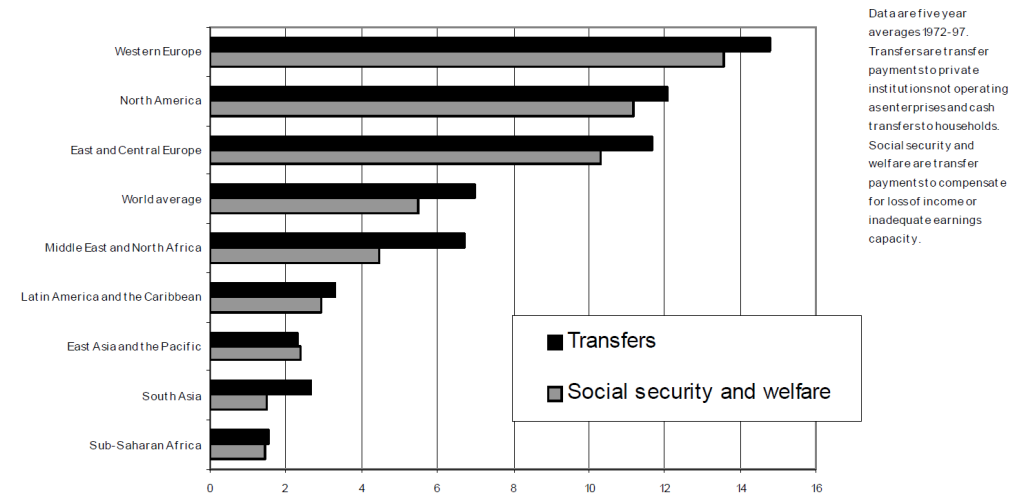


More social protection as GDP rises



Social insurance data are from ILO Social Security Inquiry.
GDP statistics are from the World Bank International Comparison Database.

Figure 1 Public expenditure on social protection as % of GDP by region



Data are five year averages 1972-97. Transfers are transfer payments to private institutions not operating as enterprises and cash transfers to households. Social security and welfare are transfer payments to compensate for loss of income or inadequate earnings capacity.

Source: Besley *et al.* (2003) from IMF data.



How do you provide assistance to the right people?

- In the U.S., formal markets with paper trail –can verify if someone lost their job, their income, any assets in the bank
 - Can also provide assistance through tax system (i.e. EITC, the U.S. fiscal stimulus checks)
- In low and middle income countries , informality, limited tax systems, and limited banking institutions means it is hard to verify income → alternative systems for finding the poor
- Challenges in delivery of aid to targeted individuals–lack of transparency, leakages and corruption → how can we make sure people get the assistance they are entitled to

Before many countries did not even try, and offered blanket subsidies in the hopes of reaching the poor

Move from subsidizing commodities.....

- Consumer energy and food subsidies have been a common form of social assistance in low- and middle-income countries for many decades
- Pros: provide some social assistance, popular
- Challenges: help the rich as much (or more) as the poor, fiscal strain (particularly if universal), distortions

Figure 7
Public health expenditure compared to fossil fuel subsidies

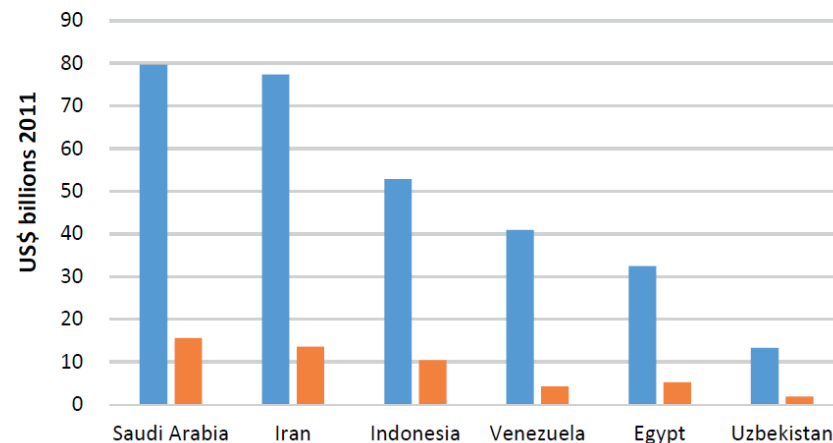
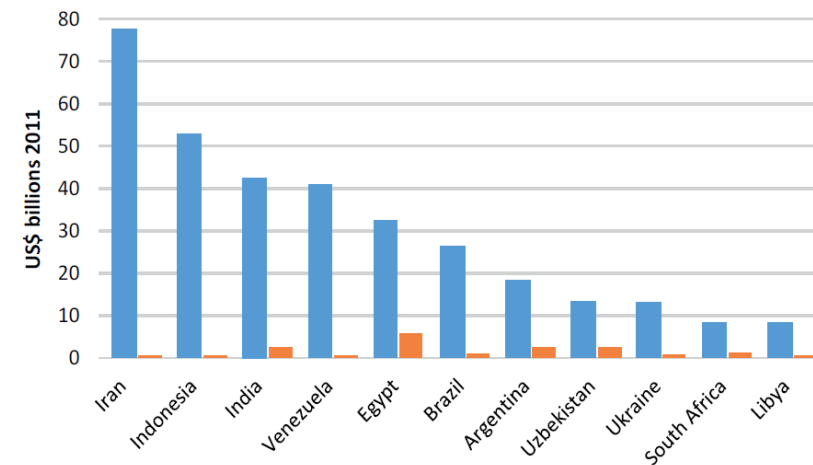


Figure 8
Aid received compared to fossil fuel subsidies



Move from **subsidizing commodities** to **targeted transfers**


- Many countries have reduced subsidies and replacing them with targeted transfers (cash or vouchers) for poor households
- At least 40 countries have reformed their energy subsidies since 2014. At least 12 introduced measures to mitigate the impact on the poor ([Asamoah et al., 2017](#))



Providing targeted transfers creates a new policy challenges

1. Who is eligible to receive assistance and how do we identify them?
2. How do we make sure assistance actually reaches the targeted families?





**Who is eligible to receive
assistance and how do we
identify them?**

The policy questions

- Indonesia moved to targeted transfers
 - Subsidized rice, scholarships, health insurance, CCTs, UCTs
- In the COVID-19 crisis:
 - A particular need to identify households who were hit by COVID-19 shock (which may not have been the same people as before)
 - With budget constraints, want to identify those most in need at a give time – means that not only do you need to identify those most in need, but also those who no longer need assistance –want a system that can target not just poverty, but shocks

How to target?

Challenging in emerging economies since governments do not observe data on incomes, particularly for the poor

METHOD	WHAT IS IT?	PROS	CONS
Proxy means test (PMT)	Government predicts income based on survey measuring household assets and characteristics	Objective, consistent	Income prediction is imperfect; it is not transparent
Community-based targeting	Community members identify poor households	Community may have better info than govt. about who is poor	They may not reliably and consistently report
Self-targeting	Poor households apply to receive program	People missed by the system can apply; rich potentially screened out—applying takes effort	People may not know about the program or have time to apply



Evaluate different methods through a series of studies



- Today's example: Proxy Means Tests vs. Community-based targeting method (vs. Hybrid method)

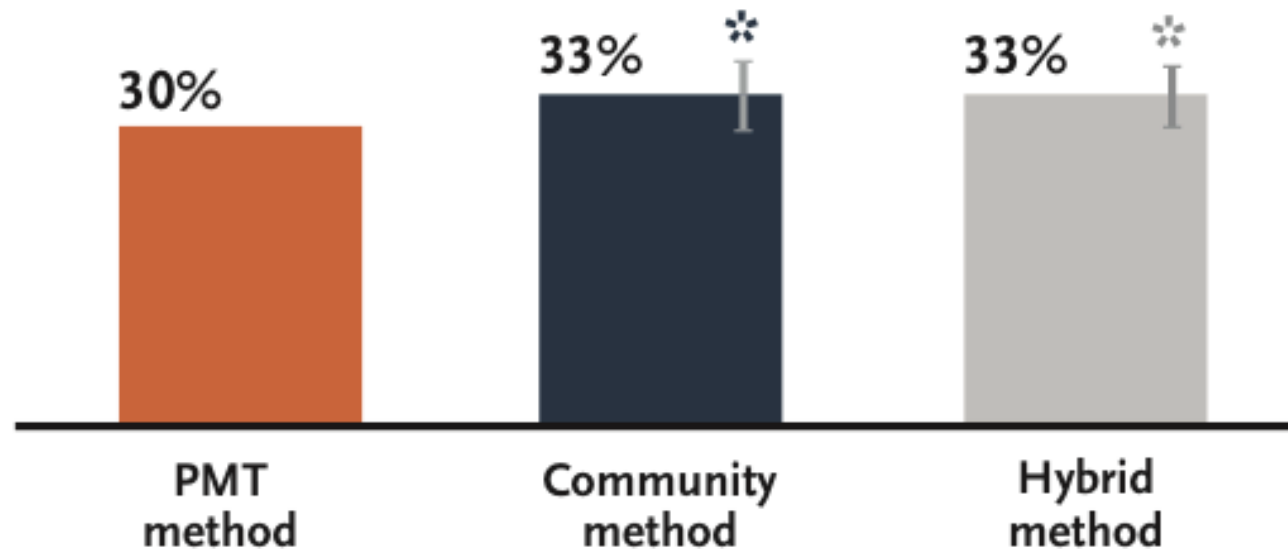
Example: Which method, proxy means tests (PMT) or community targeting, performed best at identifying the poor?

640 villages were randomly assigned to one of three targeting approaches for a one-time cash transfer to low-income households of IDR 30,000.

Proxy Means Test (PMT) Method	Community Method	Hybrid Method
<ul style="list-style-type: none">• 49 indicators to create a PMT score• Government collects data on hh assets, education, occupations, etc.• Hhs with lowest PMT score receive transfer	<ul style="list-style-type: none">• Residents ranked hhs from richest to poorest• Community meeting led by trained facilitators• The poorest hhs from ranking received transfer	<ul style="list-style-type: none">• Combined community ranking meeting with PMT verification• Residents ranked all hhs• Government surveyors visited the lowest-ranked hhs to verify eligibility using PMT

PMT had slightly lower targeting error, but errors were concentrated among people close to the poverty threshold.

FIGURE 1: TARGETING ERROR UNDER EACH METHOD



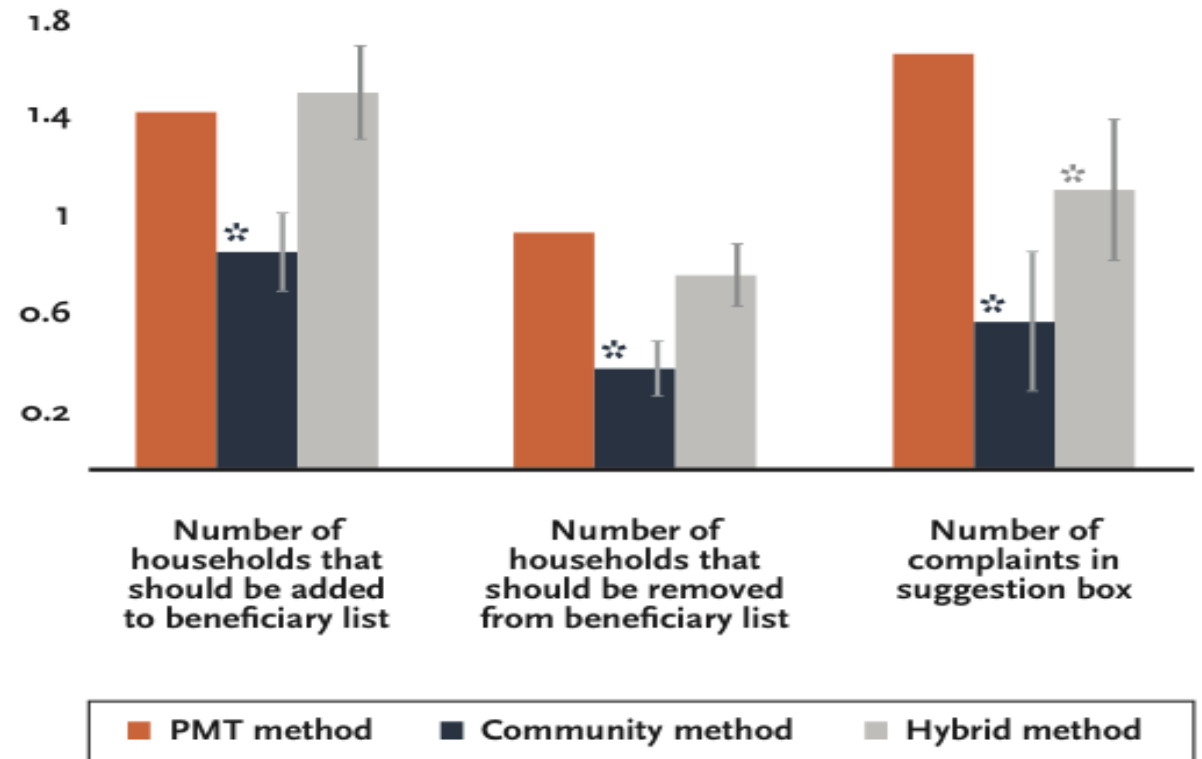
Alatas, Vivi, Abhijit Banerjee, Rema Hanna, Benjamin A. Olken, and Julia Tobias. 2012. "Targeting the Poor: Evidence from a Field Experiment in Indonesia." *American Economic Review* 102(4): 1206-1240.



Other measures that we may care about?

Community targeting led to much higher community satisfaction, better selected households that self-identify as poor, and chose slightly different characteristics of households than the PMT.

FIGURE 2: IMPACT OF THREE METHODS ON COMMUNITY SATISFACTION



Community targeting to fill in the gaps during COVID-19

September 2020: Indonesian Ministry of Village used the community targeting method to reach **8 million recipients** nationwide (who were being missed by data driven approaches), including 2.5 million female breadwinners



Photo: Talitha Chairunissa





How to ensure assistance reaches poor families?

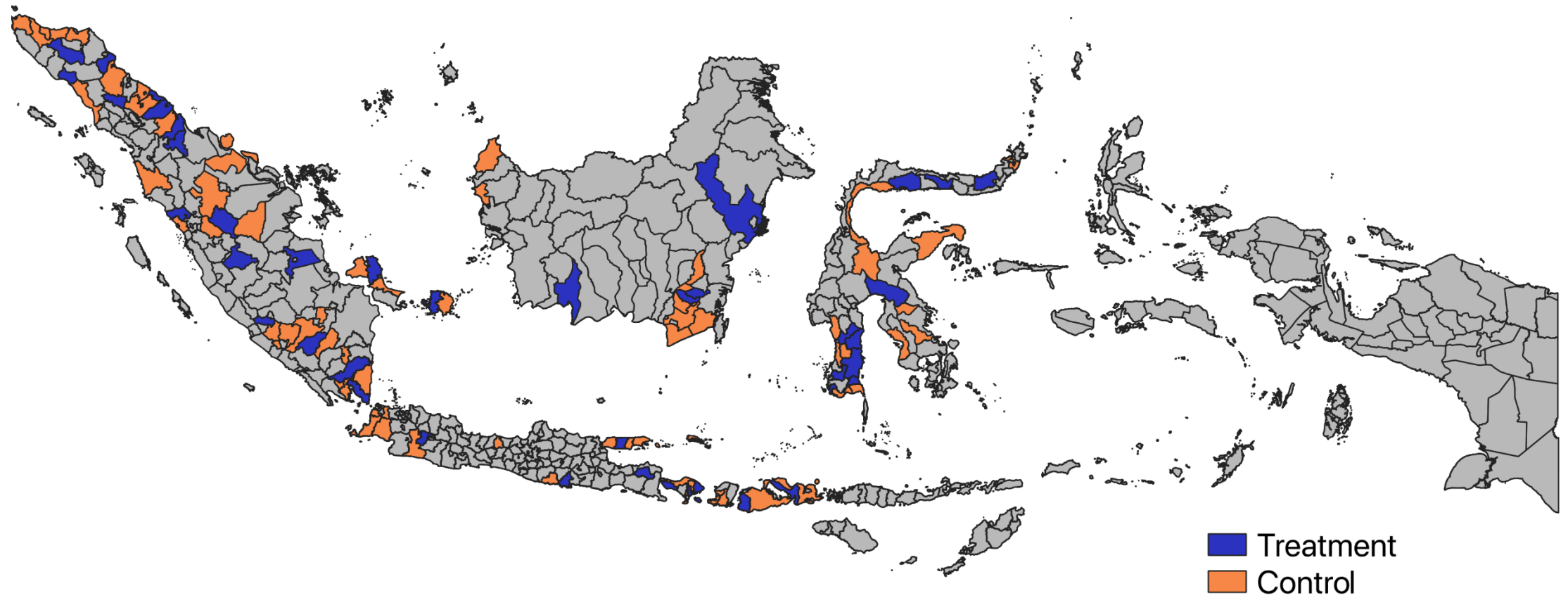
We conducted a number of studies to improve transparency and distribution, but today I will highlight one study.



Changing what you give

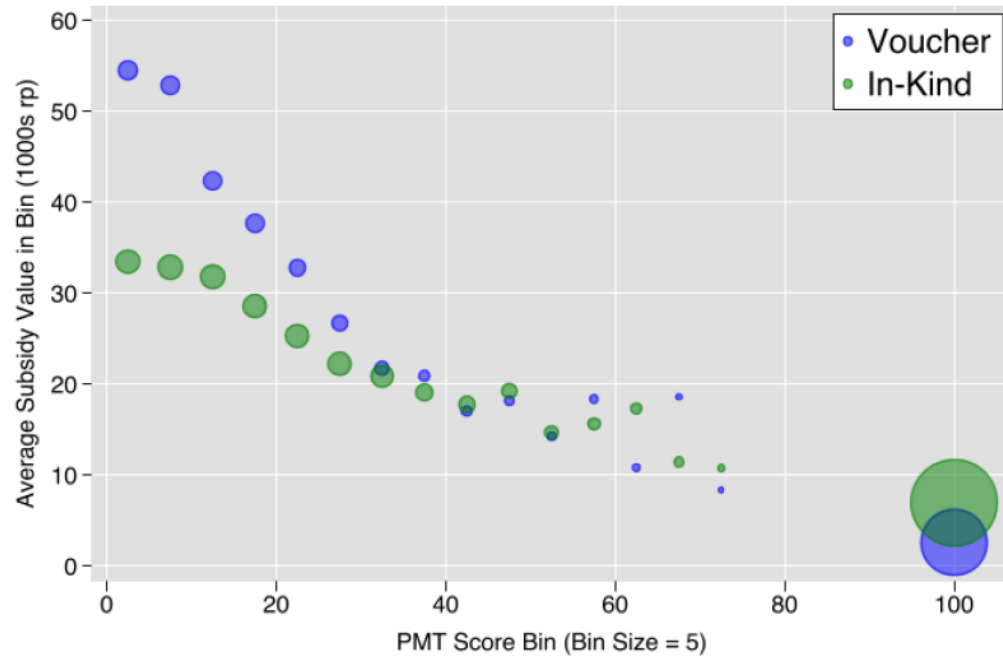
- Indonesia instituted a large-scale reform:
 - Existing in-kind program: 10kg/month of free, government provided rice
 - New voucher program: digital voucher redeemable for rice or eggs at private agents throughout the country
- Randomization at Scale:
 - 105 districts randomly phased in from 2018-2019: 3.4 HH million beneficiaries, population: 54 million
 - Measure GE effects and administration in a real-world setting
 - Use national sample survey to evaluate impacts

Randomization Map

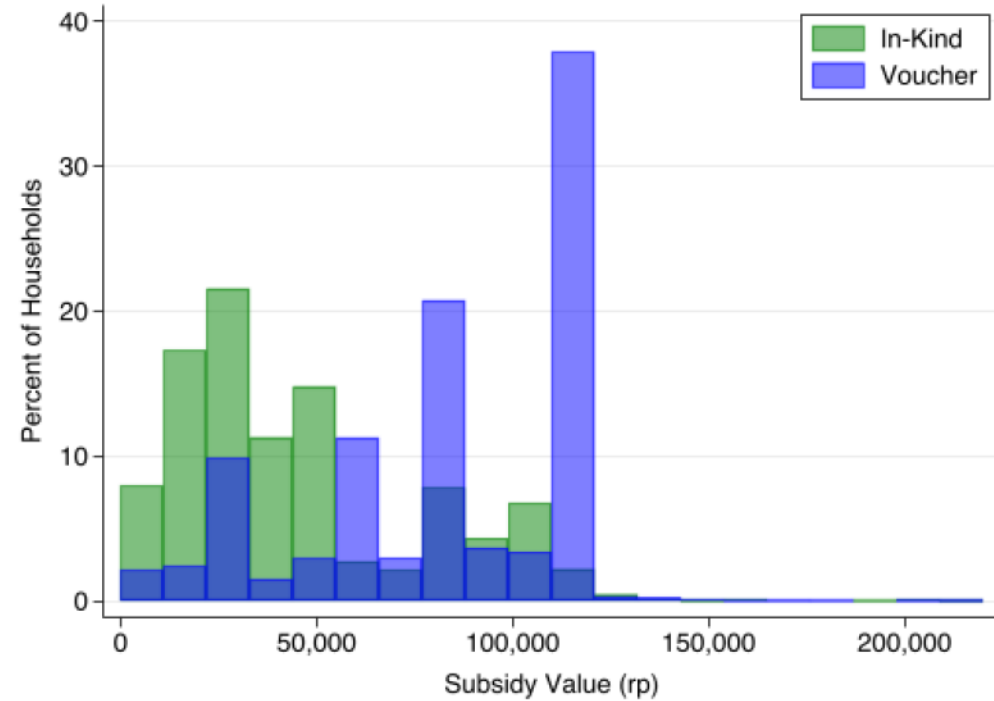


Vouchers concentrate the benefits

Panel A: Total Subsidy (1000s rp)



Panel B: Recipient households with PMT score ≤ 30



Much more of the subsidy is going to the targeted households

Conditional on receipt, much more likely to receive the full amount



How does the concentration of aid affect actual poverty levels?

Table 2: Experimental Difference between Voucher and In-kind Districts Being Below the Poverty Line

	All (1)	PMT \leq 30 (2)	PMT \leq 25 (3)	PMT \leq 20 (4)	PMT \leq 15 (5)	PMT \leq 10 (6)	PMT \leq 5 (7)
Voucher	-0.010 (0.008) [0.199]	-0.023 (0.015) [0.134]	-0.025 (0.016) [0.166]	-0.034 (0.017) [0.078]	-0.043 (0.018) [0.028]	-0.052 (0.020) [0.020]	-0.065 (0.024) [0.012]
Observations	66496	16329	13707	11072	8307	5529	2788
Stratum FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Double Lasso	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DV Mean (Control)	0.098	0.180	0.189	0.198	0.210	0.237	0.267

- For PMT \leq 15, we find a 4.3pp (20%) reduction in poverty



Conclusions

Importance of Social Protection

- COVID-19 crisis laid bare the positive and challenging features of social protection systems in many developing countries
- Research shows that you can:
 - Create more flexible targeting systems by incorporating “soft” information in addition to the data driven approaches
 - Improving program design could have large effects on reducing poverty, even at the same budget level

