Public expenditures in Africa before, during, and after Covid-19

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June 2021

The Covid-19 pandemic

- Market failure
  - One infected person can infect several others
  - Benefits of preventing spread of infection accrue to society but cost (mask-wearing, social distancing, working from home) is borne by the individual
- Role for government (public spending on health, etc., regulation)
- But there are many government failures
  - Incentives to deliver public services
  - Lack of political support for expenditures that help the poor
- How can governments intervene to correct both market and government failures?

I. Health spending

Higher share of public health spending goes to the richest 20% than to the poorest 20%

Country	Quintile shares of								Total subsidy as % of per capita expenditure	
	Primary facilities		Hospital outpatient		Hospital inpatient		All health			
	Poorest	Richest	Poorest	Richest	Poorest	Richest	Poorest	Richest	Poorest	Richest
Africa										
Côte d'Ivoire (1995)[a]	14	22	8	39			11	32	2.0	1.3
Ghana (1992)	10	31	13	35	11	32	12	33	3.5	2.3
Guinea (1994)[a]	10	36	1	55			4	48		
Kenya (1992)[a, b]	22	14	13	26			14	24	6.0	1.1
Madagascar (1993)[a]	10	29	14	30			12	30	4.5	0.5
United Republic of Tanzania (1992–93)	18	21	11	37	20	36	17	29	NA[c]	NA
South Africa (1994)[a]	18	10	15	17			16	17	28.2	1.5
Others										
Indonesia (1990)	18	16	7	41	5	41	12	29	1.0	0.5
Viet Nam (1993)	20	10	9	39	13	24	12	29	2.1	0.9

[a] Hospital subsidies combine inpatient and outpatient spending.

[b] Rural only.

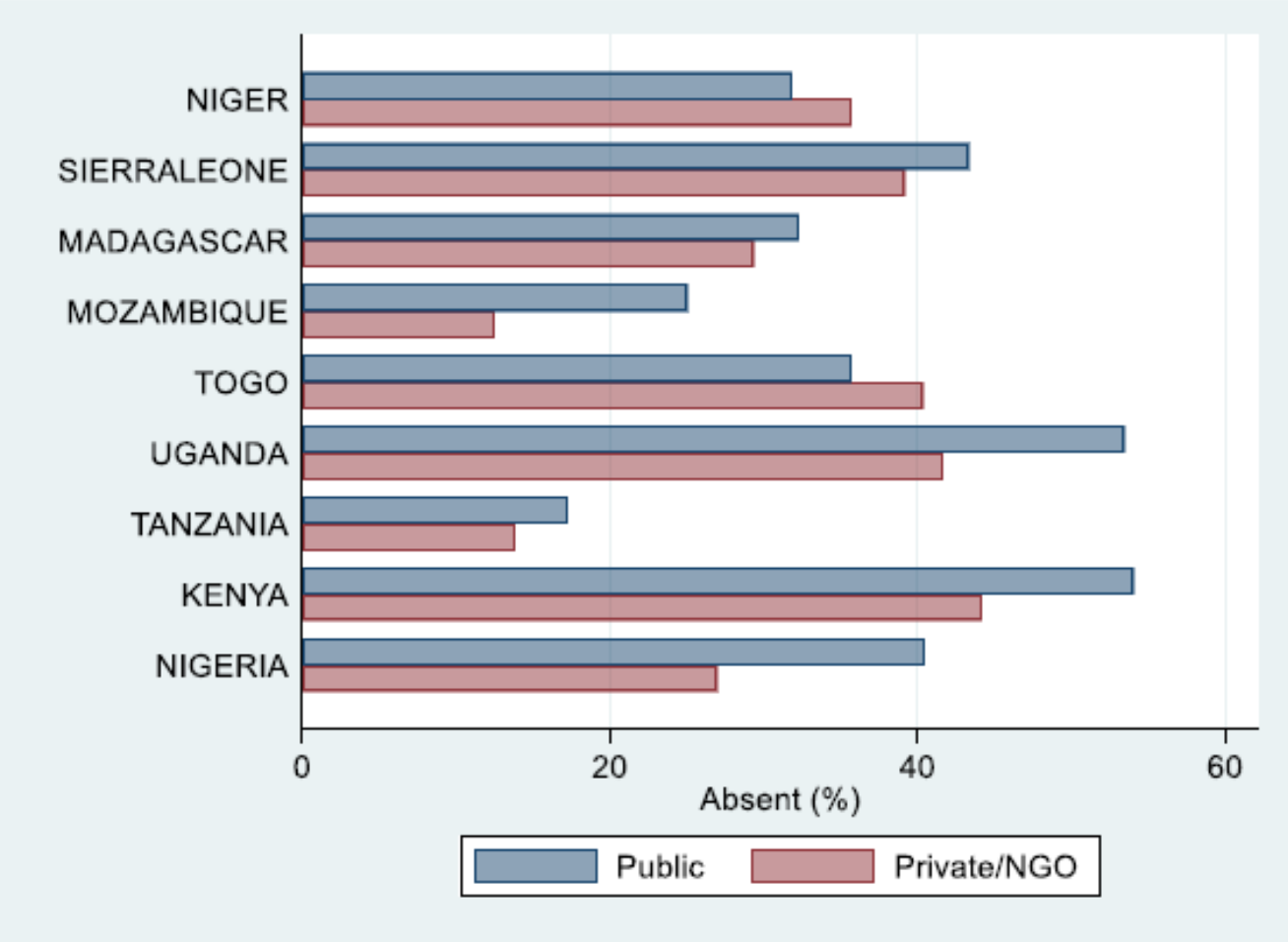
[c] NA = not available.

Resources leak before reaching the clinic

Country (year)	% of cash/in-kind resources leaked	Resource Category
Kenya (2004)	38	Non-salary budget
Tanzania (1991)	41	Non-salary budget
Uganda (2000)	70	Drugs and supplies
Ghana (2000)	80	Non-salary budget
Chad (2004)	99	Non-salary budget

Source: Gauthier (2006)

Health providers are often absent



Gatti, R. et al., Service Delivery Indicators: Insights into the Quality of Health and Education in Ten African Countries, 2021

When present, providers spend very little time with patients Tanzania

Table 22: Time Spent Counseling Patients per Clinician (per day)

All	Rural	Urban
29 min (4 min)	26 min (4 min)	36 min (11 min)

Note: Weighted mean with standard errors adjusted for weighting and clustering in parenthesis. 165 observations, of which 39 are urban health facilities.

Source: Tanzania: Service Delivery Indicators, World Bank, 2013

What can be done?

- Community participation

Effects of community-based monitoring of health providers

TABLE VI
PROGRAM IMPACT ON HEALTH OUTCOMES

Dependent variable	Births	Pregnancies	U5MR	Child death	Weight-for-age z-scores	
Specification:	(1)	(2)	(3)	(4)	(5)	(6)
Program impact	−0.016	−0.03**	−49.9*		0.14**	0.14**
	(0.013)	(0.014)	(26.9)		(0.07)	(0.07)
Child age (log)						−1.27***
						(0.07)
Female						0.27***
						(0.09)
Program impact × year of birth 2005				−0.026**		
				(0.013)		
Program impact × year of birth 2004				−0.019**		
				(0.008)		
Program impact × year of birth 2003				0.003		
				(0.009)		
Program impact × year of birth 2002				0.000		
				(0.006)		
Program impact × year of birth 2001				0.002		
				(0.006)		
Mean control group 2005	0.21	0.29	144	0.029	−0.71	−0.71
Observations	4,996	4,996	50	5,094	1,135	1,135

Notes. Estimates from equation (1) with district fixed effects and baseline covariates as listed in Table II included. Specification (4) also includes a full set of year-of-birth indicators. Robust standard errors in parentheses (21), clustered by catchment area (1–21) (4)–(6). Program impact measures the coefficient on the assignment to treatment indicator. Specifications: (1) Number of births in the household in 2005; (2) indicator variable for whether any women in the household are or were pregnant in 2005; (3) U5MR is under-5 mortality rate in the community expressed per 1,000 live births (see text for details); (4) indicator variable for child death in 2005; (5)–(6) weight-for-age z-scores for children under 18 months excluding observations with recorded weight above the 90th percentile in the growth chart reported in Gorstein et al. (1987).

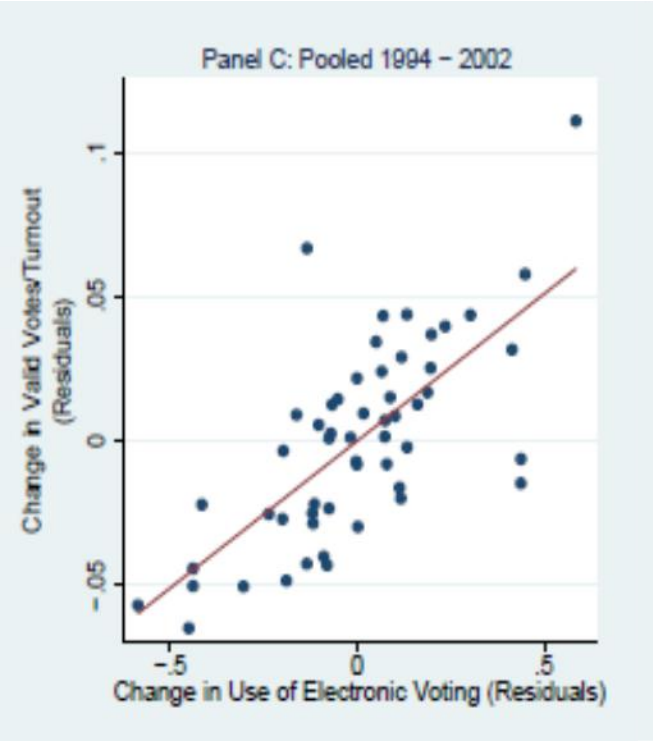
*Significant at 10% level.
**Significant at 5% level.
***Significant at 1% level.

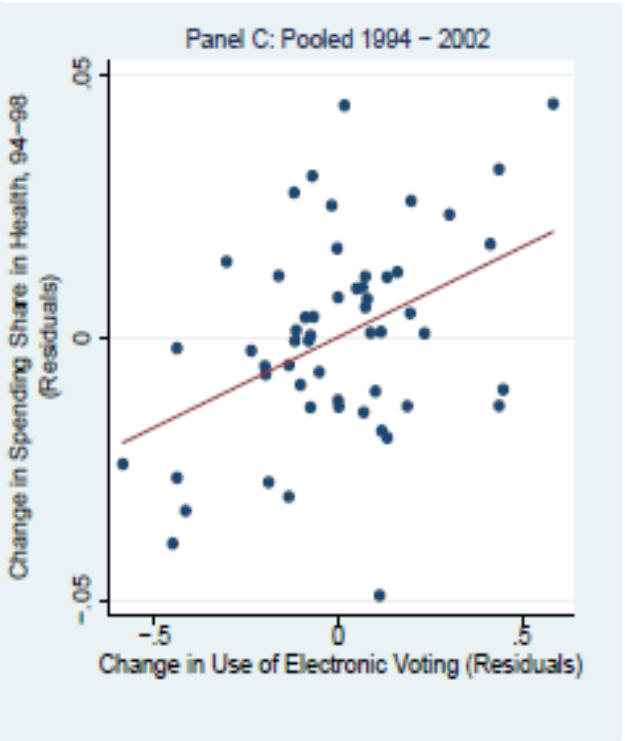
Source: M. Borkman and J. Svensson, Power to the People: Evidence from a Randomized Field Experiment on Community-based Monitoring in Uganda, Quarterly Journal of Economics, May 2009.

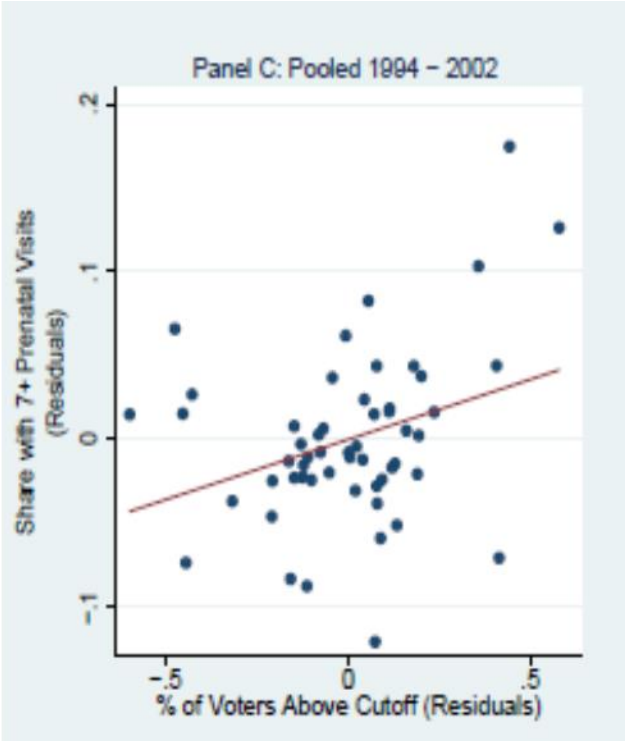
What can be done?

- Community participation
- Enfranchising poor voters

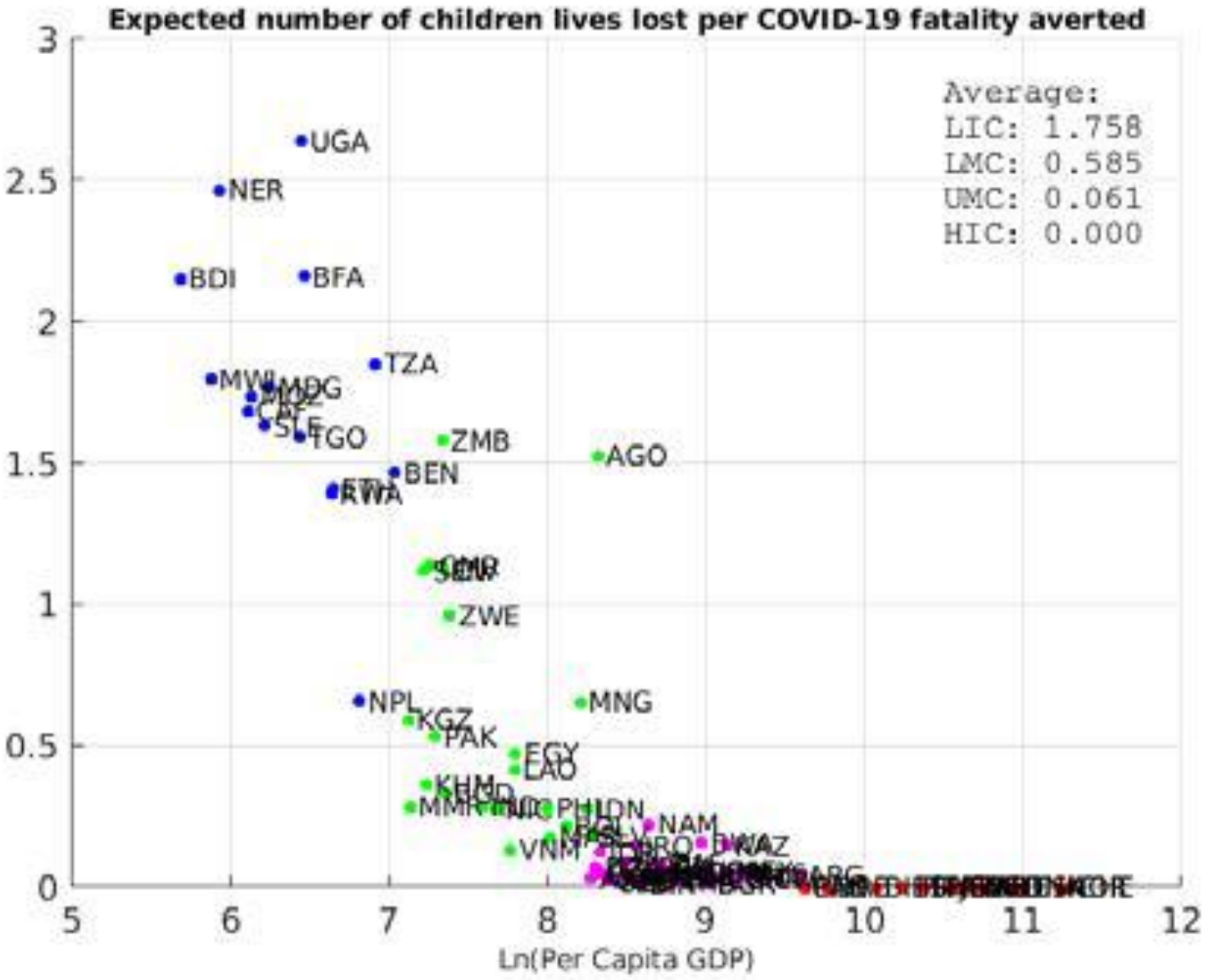
Enfranchising poor citizens and health outcomes







Source: Fujiwara, T. (2015), Voting Technology, Political Responsiveness, and Infant Health: Evidence From Brazil. Econometrica, 83: 423-464



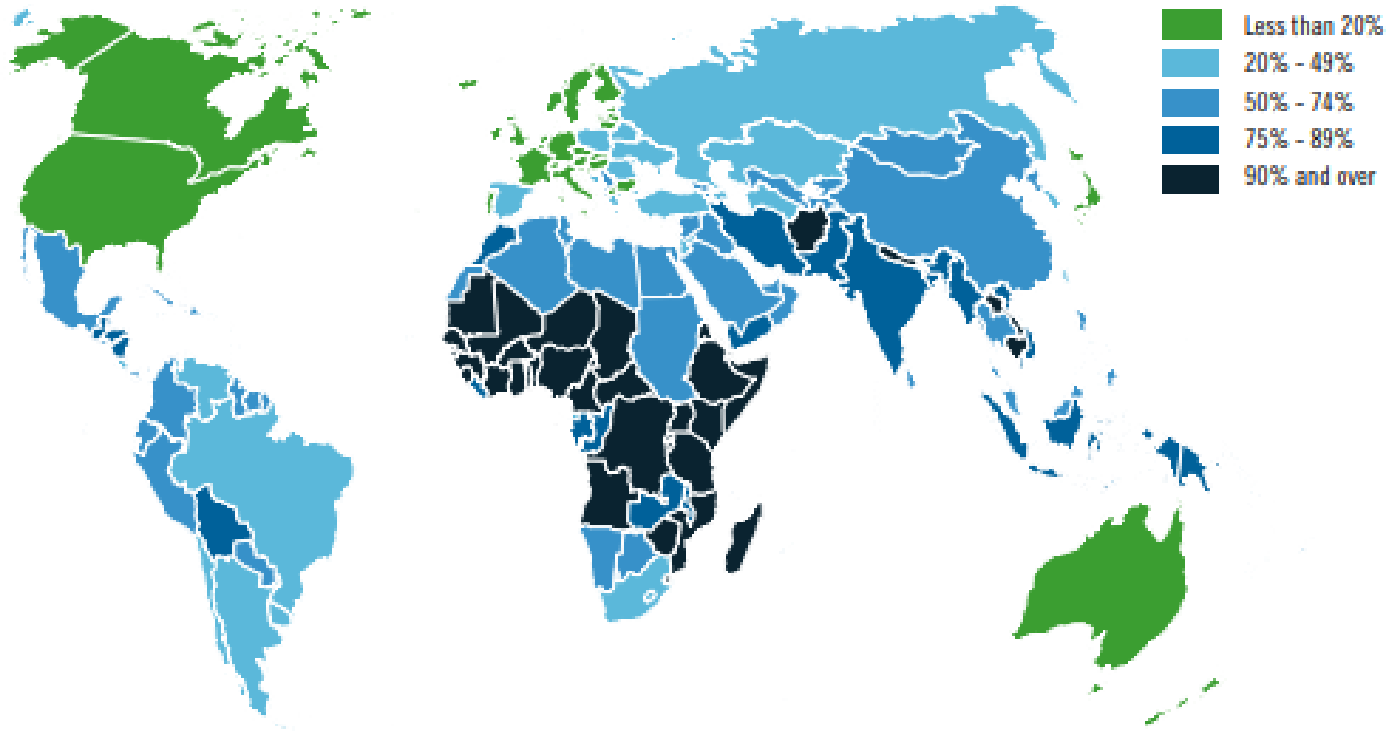
Lin Ma, Gil Shapira, Damien de Walque, Quy-Toan Do, Jed Friedman, and Andrei A. Levchenko, The Intergenerational Mortality Tradeoff of COVID-19 Lockdown Policies, NBER Working Paper No. 28925, June 2021

II. Social protection

Majority of workers in Africa are self-employed or casual

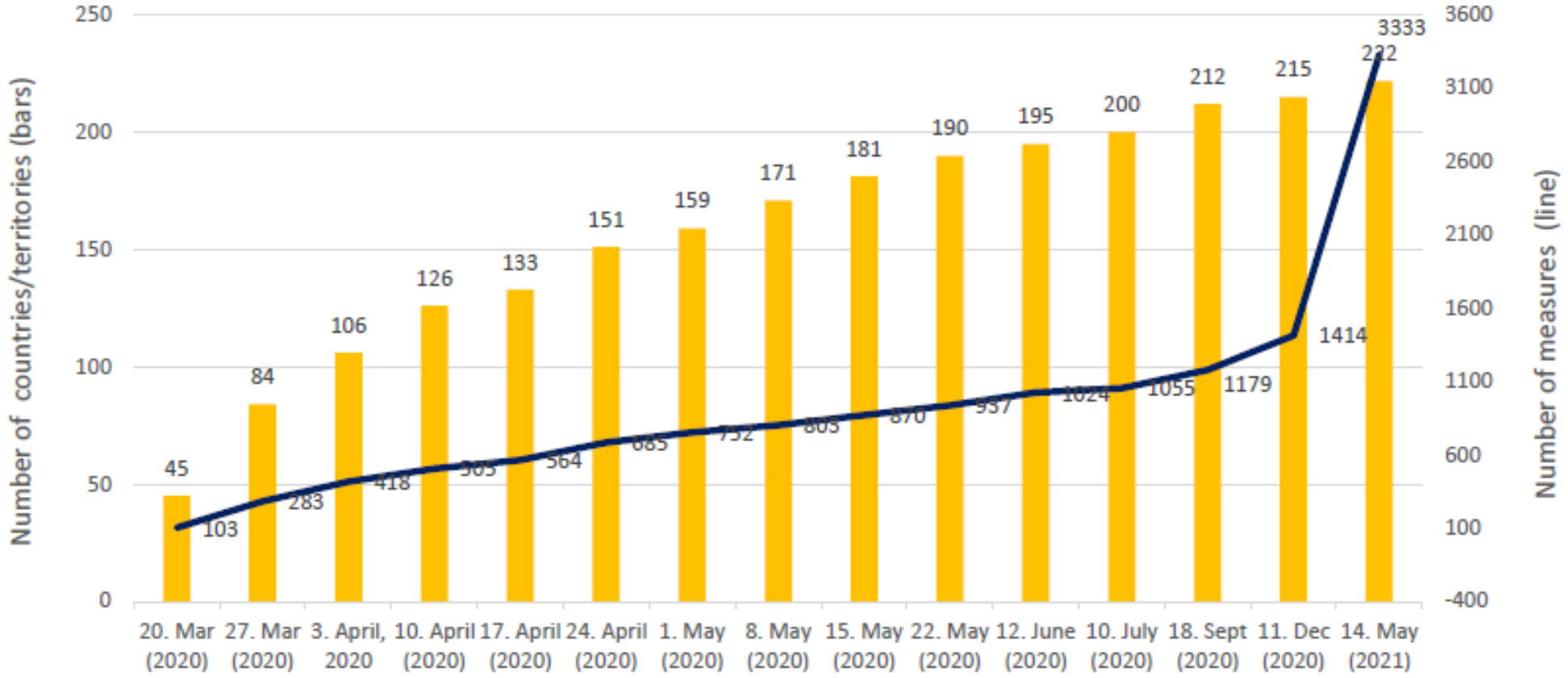
Figure 5. Share of informal employment in total employment, including and excluding agriculture (percentages, 2016)

Panel A. Including agriculture[9]



Source: International Labor Office, Women and Men in Informal Employment, 2018

Figure 1. Evolution in number of countries/territories and social protection measures



Source: Gentilini, U. et al., Social Protection and Jobs Responses to Covid-19: Real-time Review of Country Measures, May 14, 2021

Sri Lanka's Samurdhi program

Table 2.2 Distribution of Samurdhi Households by Quintiles[22]

Pre-transfer Per capita expenditure quintiles	Total Sample	No. of Samurdhi households	% of Samurdhi households
Full sample	*5524**	*2213***	*100*
Bottom 20th percentile	1043	659	30
20th - 40th percentile	1058	581	26.2
40th - 60th percentile	1020	457	20.6
60th – 80th percentile	1077	339	15.3
Top 20th percentile	1326	177	7.8

Notes to Table 2.2:

(a) *Six observations were dropped since these households lacked expenditure data.

(b) ** Two observations in the Samurdhi sample lacked expenditure data.

Table 2.3 Samurdhi Coverage by per capita Expenditure Quintiles

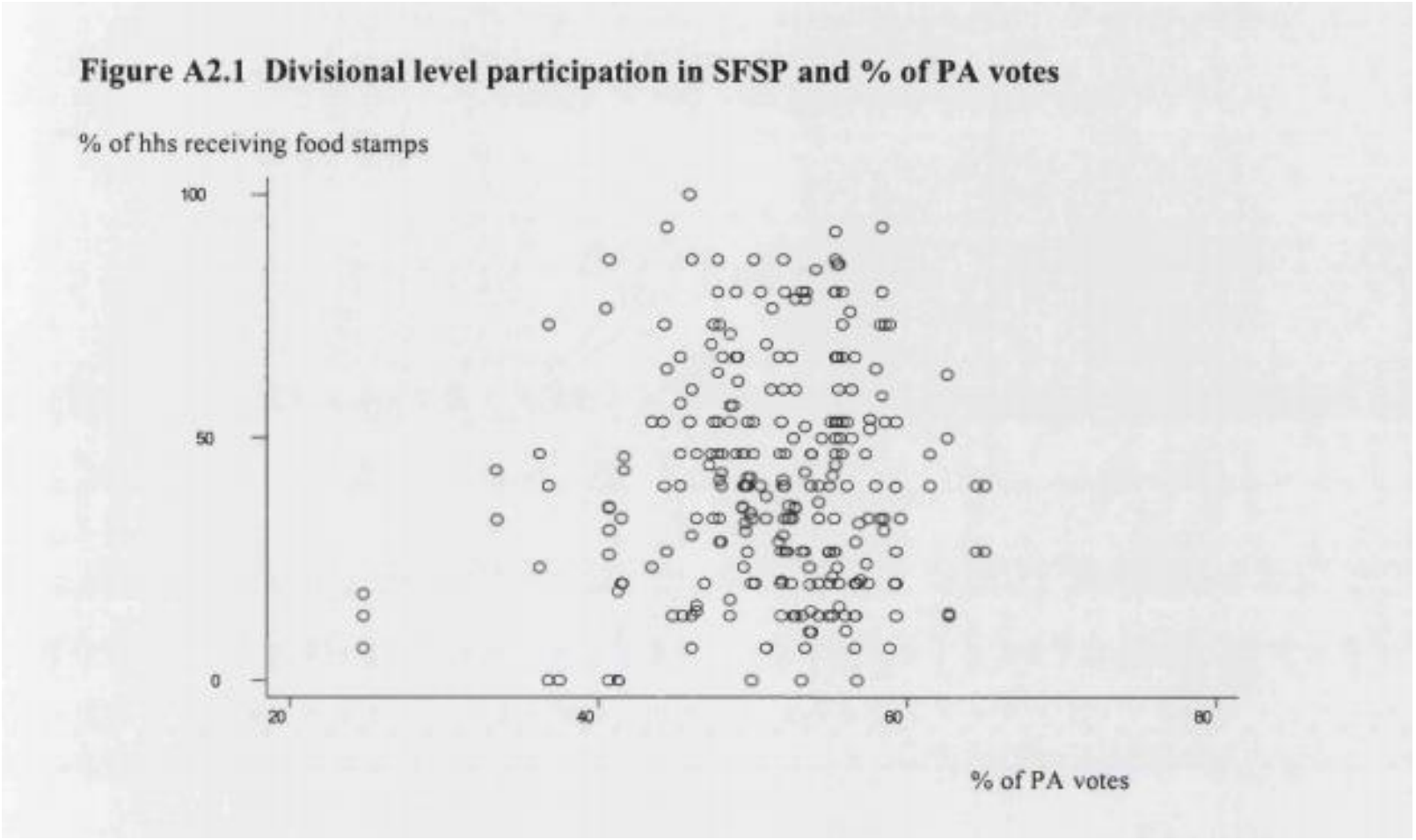
Pre-transfer Per capita expenditure quintiles	N=total sample	% of N who participate in SFSP
Full sample	*5524**	*40*
Bottom 20th percentile	1043	63.18
20th - 40th percentile	1058	54.91
40th - 60th percentile	1020	44.80
60th – 80th percentile	1077	31.48
Top 20th percentile	1326	13.35

*Six observations were dropped since these households lacked expenditure data.

Source: Sharif, Iffath, *Social Interactions, Election Goals and Poverty Reduction: Evidence from an Anti-Poverty Program in Sri Lanka,* Ph. D. Thesis, London School of Economics

Political capture of social protection programs in Sri Lanka

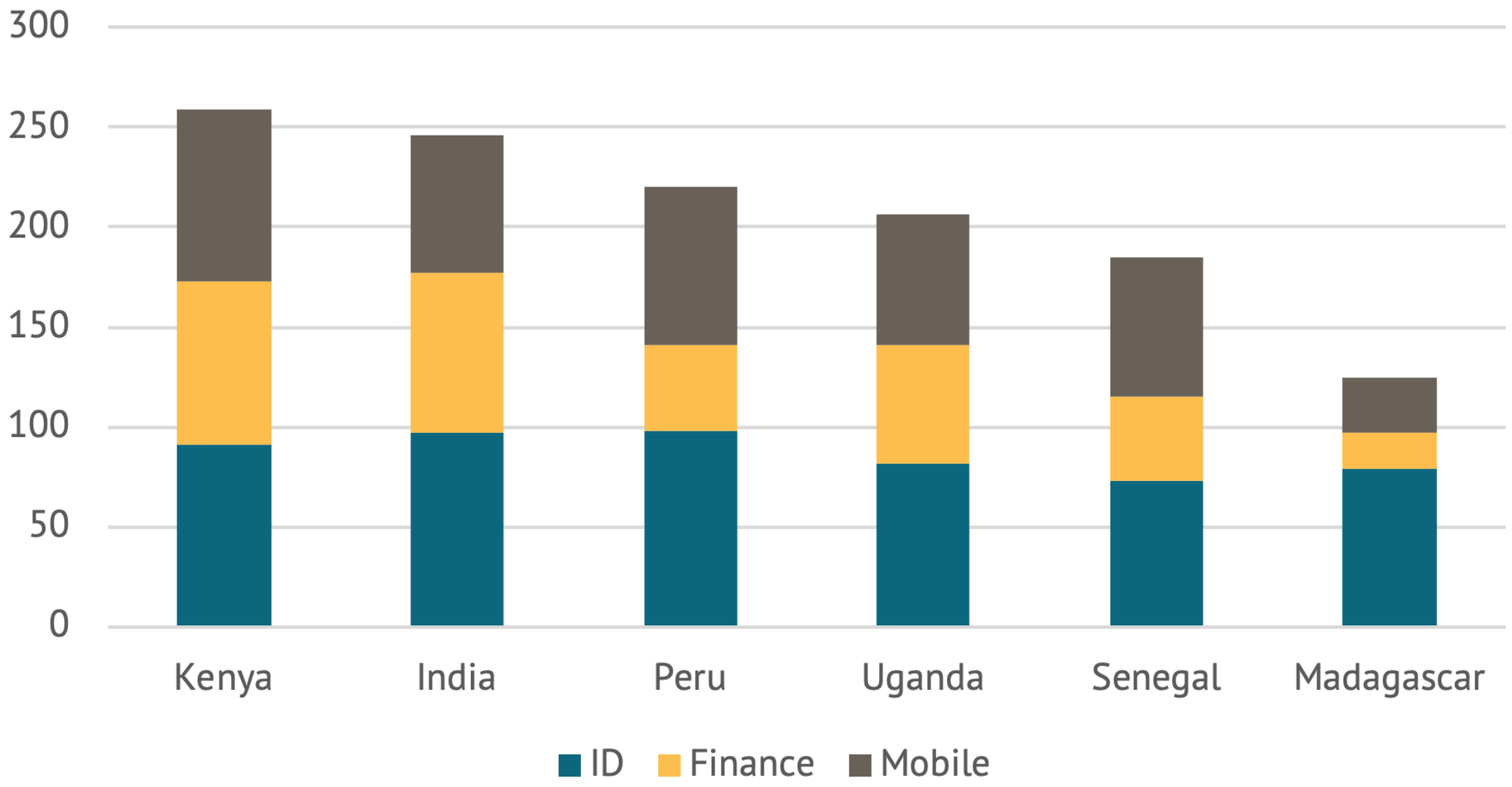
Figure A2.1 Divisional level participation in SFSP and % of PA votes



What can be done?

- Technology for cash transfers

JAM=Jan Dhan bank account, Aadhar unique ID, Mobile phone

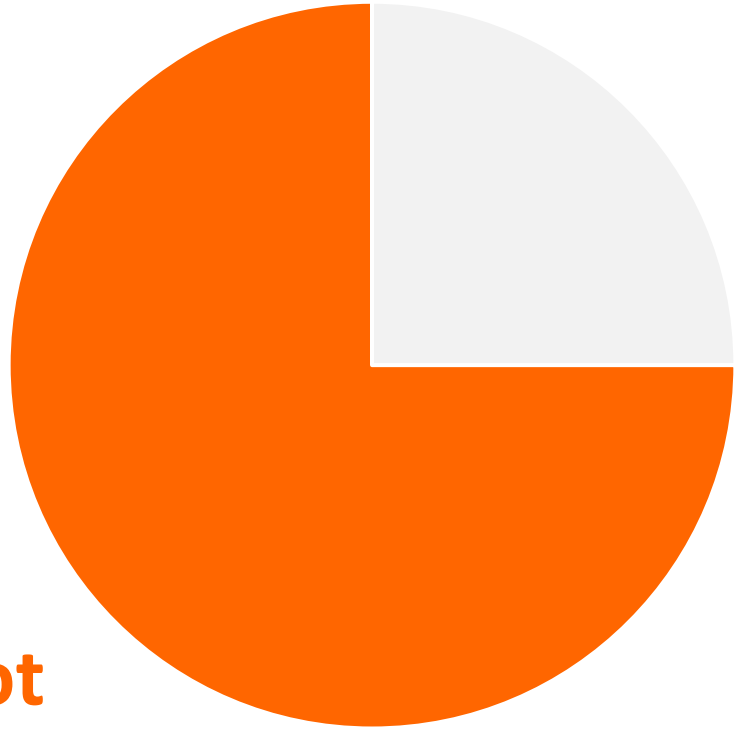


Source: A. Gelb and A. Mukherjee, "How countries can use digital payments for better, quicker transfers," Center for Global Development, April 6, 2020

III. Education

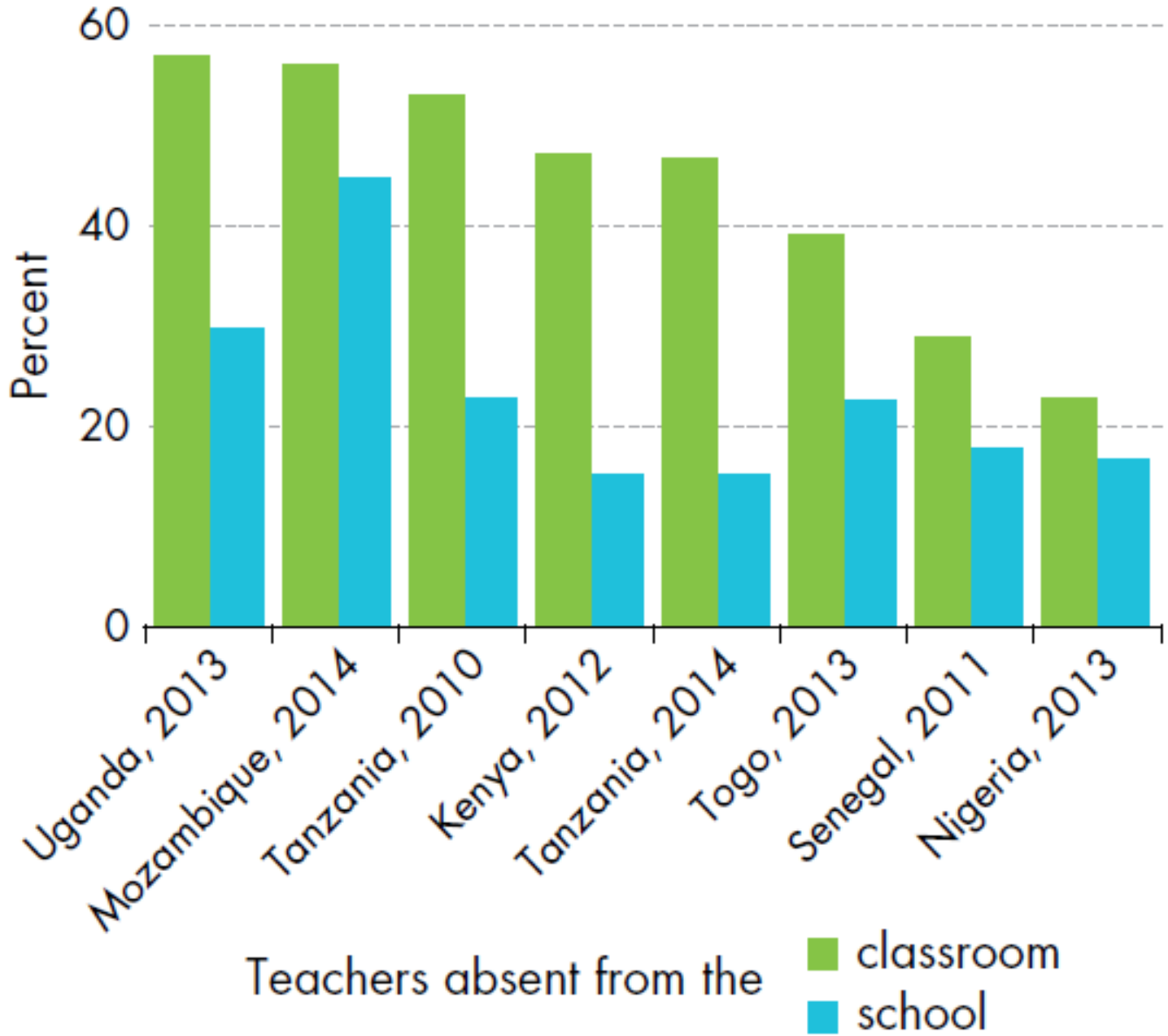
Kenya, Tanzania, and Uganda

"The name of the dog is Puppy"



Could not understand

Grade 3



*

* Nigeria here is 4 States: Anambra, Bauci, Ekiti, Niger

Table 2

Teachers' Content Knowledge: Minimum Thresholds

	All	*Min*	*Max*
Subject knowledge: Language			
Teachers with …			
80% of knowledge equivalent to a 4th grader	66%	26% (Nigeria)	94% (Kenya)
Minimum knowledge for teaching	7%	0% (Mozambique, Nigeria, Tanzania survey I, Togo)	34% (Kenya)
Number of teachers	3,770		
Subject knowledge: Mathematics			
Teachers with …			
Minimum knowledge for teaching	68%	49% (Togo)	93% (Kenya)
Number of teachers	3,957		

Source: Bold, Tessa, Deon Filmer, Gayle Martin, Ezequiel Molina, Brian Stacy, Christophe Rockmore, Jakob Svensson, and Waly Wane. 2017. "Enrollment without Learning: Teacher Effort, Knowledge, and Skill in Primary Schools in Africa." *Journal of Economic Perspectives*, 31 (4): 185-204.

What can be done?

- Teaching at the Right Level

"Teaching at the Right Level (TaRL)"

Classes held outside regular school hours that group students from different grades who are at the same level of learning.

Table 3: Language and Math Results

	Language	Math
A. Bihar – Summer Camp		
Treatment	0.0867**	0.0742*
	(0.0417)	(0.0440)
Observations	2839	2838
B. Bihar – School Year		
M	0.0168	0.0405
	(0.0392)	(0.0406)
TM	0.0426	0.0145
	(0.0384)	(0.0389)
TMV	0.125***	0.105***
	(0.0350)	(0.0366)
Observations	6490	6490
C. Uttarakhand		
TM	0.0636	0.0591
	(0.0410)	(0.0451)
TMV	0.0119	0.0252
	(0.0312)	(0.0441)
Observations	3763	3762
D. Haryana		
TaRL	0.154***	-0.00611
	(0.0173)	(0.0170)
Observations	11963	11962
E. Uttar Pradesh		
M	0.0336	0.0449**
	(0.0219)	(0.0228)
10-Day Camp	0.701***	0.694***
	(0.0224)	(0.0242)
20-Day Camp	0.609***	0.620***
	(0.0229)	(0.0243)
Observations	17254	17265

Standard errors in parentheses (clustered at level of randomization). Regressions control for baseline test scores, as well as gender, age, and standard at baseline. Test scores are normalized using the mean and standard deviation for the control group in each test's respective round. *Significant at the 10 percent level. **Significant at the 5 percent level. ***Significant at the 1 percent level. M = Materials, TM = Teachers and materials, TMV = Materials, training and volunteer support, TaRL = Teaching at the right level

Source: Mainstreaming an Effective Intervention: Evidence from Randomized Evaluations of "Teaching at the Right Level" in India Abhijit Banerjee, Rukmini Banerji, James Berry, Esther Duflo, Harini Kannan, Shobhini Mukherji, Marc Shotland, and Michael Walton NBER Working Paper No. 22746 October 2016

What can be done?

- Teaching at the right level
- Information about school quality

American Economic Review 2017, 107(6): 1535–1563
https://doi.org/10.1257/aer.20140774

Report Cards: The Impact of Providing School and Child Test Scores on Educational Markets†

By Tahir Andrabi, Jishnu Das, and Asim Ijaz Khwaja*

We study the impact of providing school report cards with test scores on subsequent test scores, prices, and enrollment in markets with multiple public and private providers. A randomly selected half of our sample villages (markets) received report cards. This increased test scores by 0.11 standard deviations, decreased private school fees by 17 percent, and increased primary enrollment by 4.5 percent.

Conclusions

- Covid-19 involves an increase in public expenditures to both treat victims, slow the spread of the disease, and compensate the poor.
- But public expenditures have not been particularly efficient nor equitable
- The reasons have to do with incentives in the public sector and political capture
- Recent evidence: community participation, transparency, and political participation of the poor leads to better public-expenditure outcomes
- We have an opportunity to not only make the Covid-19 spending more effective but pave the way for more efficient and equitable public spending in the post-Covid era.